

DIVISION OF CONSUMER ADVOCACY
Department of Commerce and
Consumer Affairs
335 Merchant Street, Room 326
Honolulu, Hawaii 96813
Telephone: (808) 586-2800

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of)
)
HAWAIIAN ELECTRIC COMPANY, INC.)
)
)
Approval of Rate Increase and Revised Rate)
Schedules and Rules.)

DOCKET NO. 2008-0083

PUBLIC UTILITIES
COMMISSION

2009 JAN 22 P 3:06

FILED

DIVISION OF CONSUMER ADVOCACY'S
INFORMATION REQUESTS

Pursuant to the Schedule of Proceedings approved in Order Approving, with Modifications, Stipulated Procedural Order Filed on January 15, 2009 and amended in Order Amending Stipulated Procedural Order Filed on January 21, 2009, the Division of Consumer Advocacy submits its **FIRST THROUGH EIGHTH SUBMISSIONS OF INFORMATION REQUESTS** in the above docketed matter which were informally filed with Applicant on the following dates:

First Submission	July 7, 2008
Second Submission	August 7, 2008
Third Submission	August 18, 2008
Fourth Submission	August 25, 2008
Fifth Submission	August 26, 2008

Sixth Submission

September 24, 2008

Seventh Submission

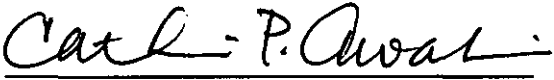
September 26, 2008

Eighth Submission

January 6, 2009

DATED: Honolulu, Hawaii, January 22, 2009.

Respectfully submitted,

By 

CATHERINE P. AWAKUNI

Executive Director

DIVISION OF CONSUMER ADVOCACY

DOCKET NO. 2008-0083

HAWAIIAN ELECTRIC COMPANY, INC.

FIRST SUBMISSION OF INFORMATION REQUESTS

General Information Requests

CA-IR-1 For each of the HECO witnesses who sponsor test period budgeted labor direct expense amounts, please provide the following information:

- a. Identify each employee involved in preparation of budgeted staffing and associated labor direct expense amounts included in the witnesses' portion of the rate case test period budget.
- b. Provide complete copies of all calculations, spreadsheet files, "pencil" workpapers, surveys and other analyses performed by each of the employees identified in response to part (a) above, documenting all work done to determine required staffing levels and overtime hours by Department, RA, Activity and NARUC Account.
- c. Describe the actual force level that existed at the date the budget was prepared or otherwise served as a base for purposes of preparing the budget level.
- d. For each budgeted employee position that is added to existing actual force levels (as of the date the budget was prepared), **explain** the analyses undertaken to determine

that each added position was necessary and should be filled in order to meet present or anticipated work requirements. Also, please explain how the anticipated work requirements were defined and determined.

- e. Describe and, to the extent possible, quantify the backlog of work, unfinished projects, deferred maintenance and other labor requirements unfulfilled at present staffing levels, that will be satisfied by adding the employee positions identified in your response to part (d) above.
- f. Provide complete copies of all studies, analyses, workpapers, projections, notes, correspondence, assumptions and other documents associated with your responses to parts (d) and (e) above.

CA-IR-2

For each of the HECO witnesses who sponsor test period budgeted non-labor direct expense amounts, please provide the following information:

- a. Identify each employee involved in preparation of budgeted non-labor direct expense amounts included in the rate case test period budget and sponsored by the witness.
- b. Provide complete copies of all calculations, spreadsheet files, "pencil" workpapers, surveys and other analyses performed by each of the employees identified in response

to part (a) above, indicating the amounts by Department, RA, Activity and NARUC Account that such calculations support.

- c. For each budgeted non-labor amount in the test period forecast that exceeds \$50,000, please describe the basis for determining the budgeted amount (for example, bid solicitation, price times quantity estimation, historical cost escalated, etc.)
- d. For each item in your response to part (c) above, where specific quantities and prices were discretely forecasted, explain the basis for and source of the budgeted quantity inputs and budgeted prices for each such item. Provide complete copies of all studies, reports and other documents that were relied upon.
- e. For each item in your response to part (c) above where historical costs were averaged and/or escalated, provide all historical cost information that was considered and explain how such data was evaluated and escalated to derive test year proposed levels.
- f. For each item in your response to part (c) above where a bid solicitation or other special analysis was conducted, explain what was done and provide complete copies of all supporting reports, bid solicitations, proposals, analyses,

workpapers and other documents associated with such efforts.

- g. Provide complete copies of all other information required to completely support and document the test year projected expense levels being proposed by the Company, including general assumptions and forecasting instructions that were employed.

CA-IR-3 To the extent not provided in response to CA-IR-1 or CA-IR-2, please provide complete copies of all other calculations, spreadsheet files, "pencil" workpapers, surveys, documentation and other analyses supporting each ratemaking adjustment (e.g., budget adjustments, normalizing adjustments, etc.) to projected test year expense, plant in service, accumulated depreciation, etc. being proposed by the Company, including any assumptions and adjustment instructions that were employed.

CA-IR-4 **Ref: HECO WP-2203 (Cost of Service Study)** To the extent not provided within any of the Company's electronic workpapers previously submitted, please provide complete copies (hard copy and excel files) of all functionalization studies, accounting classification studies, load studies, loss studies and other supportive analyses for the Company's class cost of service study.

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HAWAIIAN ELECTRIC COMPANY, INC.

SECOND SUBMISSION OF INFORMATION REQUESTS

- CA-IR-5 Please provide copies of the following documents for Hawaiian Electric Industries, Inc. ("HEI"), Hawaiian Electric Company, Inc. ("HECO"), and/or Maui Electric Company, Limited ("MECO"):
- a. 2007 Annual Report to Stockholders;
 - b. 2007 Statistical Supplement to Annual Report;
 - c. 2007 Form 10-K;
 - d. Prospectus for most recent public offering of common stock;
 - e. Prospectus for most recent public offering of long-term debt;
 and
 - f. Prospectus for most recent public offering of preferred stock
 or hybrid securities.
- CA-IR-6 Please provide copies of all reports prepared by rating agencies that describe HEI and/or HECO for the period 2007 to the present.
- CA-IR-7 Please provide copies of all reports prepared by security analysts that describe HEI for the period 2007 to the present.
- CA-IR-8 Please provide a schedule that shows the capital structures for HEI (consolidated), HECO (consolidated) HECO (Oahu only), MECO,

and Hawaii Electric Light Company, Inc. ("HELCO") for the period 2003 – 2007 and for the test period in this proceeding.

CA-IR-9 Please provide a schedule that shows the segment information for HEI for each year 2003 – 2007.

CA-IR-10 Please identify any methodological or data changes, except for the time frame of information contained in the capital structure and/or cost rates of fixed cost components, of HECO's current application.

CA-IR-11 Please provide a schedule that shows the various security ratings of HEI and HECO for each year 2003 to the present.

CA-IR-12 Please provide copies of any presentations of HEI and HECO given to security analyses and rating agencies for the period 2007 to present.

Witness T-19 Roger A. Morin

CA-IR-13 Please identify every public utility rate proceeding in which Dr. Morin has testified in since 2000 and provide the following information for each proceeding:

- a. Name of Company;
- b. Name of Jurisdiction;

- c. Docket Number;
- d. Date of Testimony;
- e. Cost of Equity Recommended; and
- f. Cost of Equity Authorized.

CA-IR-14 Please provide a copy of the source data used in deriving the "Allowed Risk Premiums", as cited on pages 33-35.

CA-IR-15 Please indicate if Dr. Morin is aware of any academic or other studies that maintain that all investors rely exclusively on analysts' forecasts of earnings per share in making investment decisions. Please cite any such studies that maintain this and indicate specifically where in the studies such a claim is made.

CA-IR-16 **RE: Statements on page 38, lines 17-25 and page 39, lines 1-2.**
Please indicate if Dr. Morin is aware of any "evidence" that challenges the use of analysts' forecasts of earnings as an indicator of stock price performance and/or cost of capital estimation.

CA-IR-17 Please identify and provide copies of any analyses used by Dr. Morin in deriving the 0.25% risk adjustment he adds to the cost of equity for the average risk electric utility in order to develop a 11.25% cost of equity for HECO.

CA-IR-18 Please identify the annual revenue impact for HECO's ratepayers associated with of Dr. Morin's proposed flotation cost adjustment.

Witness T-20 Tayne Sekimura

CA-IR-19 Please provide copies of all S&P and Moody's articles cited in footnotes that are not already included in exhibits.

CA-IR-20 Please identify any changes in methodology used to calculate the costs of short-term debt, long-term debt, hybrid securities and preferred stock in this case, relative to the methodology used in the most recent HECO rate proceedings.

Witness T-21 Steve M. Fetter

CA-IR-21 **RE: Statement on page 6, lines 15-16 Regarding "Recessionary Fears that Currently Exist about the U.S. Economy."**

Please indicate if Mr. Fetter believes that the possibility of a recession should be viewed as a risk to HECO and if Mr. Fetter believes that HECO should receive a higher return on equity because of a fear of recession.

CA-IR-22

RE: Statement on pages 9-12 Regarding Importance of Regulation in Security Ratings.

Please provide Mr. Fetter's views, as well as any rating agency views he is aware of, concerning the relative regulatory environment in Hawaii.

CA-IR-23

Please provide copies of source documents cited in the following footnotes:

- a. 2,
- b. 3,
- c. 8,
- d. 13,
- e. 14,
- f. 15,
- g. 16, and
- h. 17.

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HAWAIIAN ELECTRIC COMPANY, INC.

THIRD SUBMISSION OF INFORMATION REQUESTS

General Information Requests.

- CA-IR-24 Please provide a complete copy of the most current available HECO management organization chart, illustrating reporting relationships among management personnel, departmental organizations and relative staffing levels within each department.
- CA-IR-25 Provide a complete and detailed copy of the formally approved operating and capital budgets that are in place for HECO for 2008.
- CA-IR-26 Please provide complete copies of the most recent available detailed budget variance reports prepared for each HECO department and cost center, comparing actual to-date 2008 financial performance to budgeted amounts and explaining the reasons for experienced budget variances.
- CA-IR-27 Provide a complete and detailed copy of the formally approved long term operating and capital forecasts that are in place for HECO for 2008 and subsequent years.

- CA-IR-28 Provide a complete and detailed copy of all existing strategic business plans that are in place for HECO for 2008 and/or later years.
- CA-IR-29 Explain how HECO reports its monthly and quarterly financial and operational performance to Hawaiian Electric Industries ("HEI") and provide a complete specimen copy of each type of recurring periodic report that is routinely employed in this process for the most current available period in 2008.
- CA-IR-30 Please provide a detailed statement of HECO and HEI actual employee levels on a quarterly basis for each year 2006 through 2008, to-date, indicating the numbers of full-time, part-time and temporary employees in each department and responsibility area ("RA") and/or other reportable work groups and the comparable numbers of authorized, but unfilled positions of each type within each department, RA or work group.
- CA-IR-31 Please provide a complete copy of the most current available HEI management organization charts, illustrating reporting relationships among management personnel, departmental organizations and relative staffing levels within each department, including an

explanation of which departments are supportive of HECO operations and the services/activities provided.

CA-IR-32 Please provide in hard copy and electronic media a complete table of HECO and HEI Departmental and RA reporting structure documentation, showing RA descriptions and indicating how each department/RA is aligned with the HECO and HEI organization charts provided in response to the preceding two information requests.

CA-IR-33 Please provide a chart showing each separate legal entity within HEI and provide the following additional information:

- a. Explain and quantify the types of recurring and non-recurring affiliate transactions that took place in 2007 and 2008 (to-date) between HECO and each affiliated entity.
- b. Describe the basis of pricing each form of affiliate transaction listed in your response to part (a) of this information request, for example fully distributed cost, market price, appraised value, etc.
- c. If any affiliate service agreements exist in connection with HECO affiliate transactions, please provide complete copies of same.

- d. Identify and describe each affiliate relationship of HECO for which Hawaii PUC notification and/or approval has been sought or received.
- e. Provide complete copies of any documents associated with your response to part (d) of this information request.

CA-IR-34 Please provide complete copies of the consolidating financial statement workpapers (income statements and balance sheets) for the HEI financial statements issued publicly for calendar 2007. Include in your response the most detailed available stand-alone income statements and balances sheets for each legal entity within HEI for each period/date, as well as details regarding elimination entries and any reclassifications made in preparing consolidated public financial statements.

CA-IR-35 Please provide a complete and detailed description of the HEI/HECO budget process and cycle, indicating the time line for each individually significant budget activity/step throughout a typical year and identifying the documents produced at each step of such process/cycle. Provide specimen copies of each type of document routinely created within the most recently completed budget cycle, including but not limited to budget assumption statements,

calendars, input forms, staffing documentation, presentation graphics and budget review/approval documentation.

CA-IR-36 Please provide a complete copy of the most recently completed Federal and State income tax returns for HECO, including all supporting schedules.

CA-IR-37 Please provide a complete copy of employee benefit documentation associated with each existing employee health, welfare or retirement plan, in the form currently provided to employees to advise them of such benefits.

CA-IR-38 a. Has the Company initiated any individually significant efficiency or cost reduction programs since January 1, 2006?

 b. If affirmative, please identify and describe each such program and provide copies of all reports analyses, projections, workpapers and other documentation related to same.

CA-IR-39 **Ref: HECO-WP-101(G); Non-Labor Projected Test Year Expenses Block/Account/Department/RA/Activity/Location/EE.**

Please provide a report showing an alternative sort of Non-Labor budgeted expenses for the test year, compared to actual historical years 2003 through 2007 and budget 2008, using the following sort

sequence: Block of Accounts/ RA/ Expense Element/ Activity.
Please provide your response in hard copy and electronic (excel)
format.

CA-IR-40

Ref: HECO-WP-101(F); Direct Labor Projected Test Year Expenses Block/Account/Department/RA/Activity/Location.

Please provide a report showing an alternative sort of Direct Labor budgeted expenses for the test year, compared to actual years 2003 through 2007 and budget 2008, using the following sort sequence: Block of Account/ RA/ Expense Element/ Activity.
Please provide your response in hard copy and electronic (excel) format.

Witness T-1 Mr. Alm.

CA-IR-41

Ref: HECO T-1, page 6, line 19 (Exclusion of DSM Surcharge Revenues and Incremental DSM Expenses).

Please provide a summary and reconciliation of the excluded DSM surcharge revenues and incremental expenses for each historical year 2006, 2007 and 2008, to-date, compared to the related incremental DSM expenses in each of such periods, indicating how such amount compare with projected test year amounts.

CA-IR-42

Ref: HECO T-1, page 12, line 23 (CT-1 Step Increase).

Please provide a detailed calculation of the proposed CIP CT-1 Step increase, or reference to each schedule within the Company's filing containing such calculations, indicating whether consideration has been given in such calculations to variable production O&M expenses, changes in fuel inventory requirements or any other operational impacts likely to be caused by commercial operation of the new generating unit.

CA-IR-43

Ref: HECO T-1, pages 15 and 16 (Full Cost Inclusion for CT-1).

Please identify each previous instance in the past ten years (Other than the cited cases on pages 15 and 16 where HECO, MECO or HELCO have proposed full inclusion of test year plant additions occurring within a prospective test year as discussed by Mr. Alm, rather than more typical average rate base treatment, indicating the Commission's ordered outcome in each instance.

CA-IR-44

Ref: HECO T-1 page 35, lines 1-3 (HECO Budget Adjustments to Limit Issues).

- a. Identify and describe each area where HECO did not eliminate cost items in its 2009 O&M budget, even though such items were contested and not included in the revenue requirement of prior rate case proceedings.

- b. Explain the basis for re-litigation of each item listed in your response to part (a) of this information request, including reference to each HECO witness addressing the issue.

CA-IR-45

Ref: HECO T-1, pages 57, lines 14-18 (Renewable Energy Resources).

Please identify and explain the present status of negotiation with each "renewable energy project" that is referenced by Mr. Alm, indicating the anticipated size, type and estimated commercial operation date for each project.

CA-IR-46

Ref: HECO T-1, page 67, lines 11-14 (ESA Demonstration Unit).

Please describe HECO's current plans and activities with regard to the ESA unit that was damaged and any ongoing or anticipated further work on ESA, indicating by referenced into budget workpapers any test year projected activities or costs for same.

CA-IR-47

Ref: HECO T-1, page 89, lines 18-25 (Budget Target Reductions).

Please describe each of the "target budget reductions" that were assigned by process area and provide a summary of HECO's actual monthly spending reductions by RA and NARUC account that have been achieved to-date in 2008. Provide copies of all

internal management reports and correspondence associated with announcement and tracking of this "target reduction" process.

CA-IR-48

Ref: HECO T-1, page 107, line 17 (Advanced Metering Infrastructure).

Please provide a complete copy of the Company's most current detailed business case study of AMI, indicating anticipated costs and benefits realizable by year and category under different AMI architectures and deployment plans that have been studied.

CA-IR-49

Ref: HECO T-1, page 34, line 22 (Rate Case Budget Instructions).

Please provide complete copies of all documents developed and circulated among HECO employees to inform them of common budget assumptions to be employed in the development of the rate case projections.

CA-IR-50

Ref: HECO 106 Proposed Rate Schedules.

Please provide the Company's proposed rate schedules in electronic Word format, indicating by "track changes" or other editing markups each change being proposed to the existing tariffs.

CA-IR-51

Ref: HECO-102, page 1; Balance Sheet "Regulatory Assets."

Please provide the following information regarding the Company's per books balance of "Regulatory Assets:"

- a. A detailed itemization of each item and amount within "Regulatory Assets" as of March 31, 2008.
- b. Identify and describe each prior Hawaii PUC Decision or other authority relied upon to record each item listed in your response to part (a) of this information request.
- c. Explain how each listed item is treated in your rate filing, indicating where any rate base or operating effects are recognized within filed Exhibits or Workpapers.
- d. State with specificity any amortization period or other accounting convention that is expected to control changes in the balance for each item listed in your response to part (a) of this information request.

CA-IR-52

Ref: HECO-102, page 2; Balance Sheet "Regulatory Liabilities."

Please provide the following information regarding the Company's per books balance of "Regulatory Liabilities:"

- a. A detailed itemization of each item and amount within "Regulatory Liabilities" as of March 31, 2008.

- b. Identify and describe each prior Hawaii PUC Decision or other authority relied upon to record each item listed in your response to part (a) of this information request.
- c. Explain how each listed item is treated in your rate filing, indicating where any rate base or operating effects are recognized within filed Exhibits or Workpapers.
- d. State with specificity any amortization period or other accounting convention that is expected to control changes in the balance for each item listed in your response to part (a) of this information request.

Witness T-2 Mr. Willoughby.

CA-IR-53

Ref: HECO T-2, page 3, line 3 (Annual Forecast).

Please explain the current status of HECO's annual forecasting process and provide a complete copy of the most recently prepared draft or final reports issued in connection with same.

CA-IR-54

Ref: HECO T-2, page 5, line14 (Actual versus Forecasted Sales in 2007).

Please provide the following:

- a. Data quantifying by class how much "actual sales in 2007 were unexpectedly lower than anticipated in the May 2007 forecast."

- b. Data disaggregating your response to part (a) of this information request, comparing 2007 actual versus May 2007 forecasted customer numbers by class and actual versus forecasted usage per customer.
- c. Monthly 2008 to-date actual kwh sales data by class, compared to the monthly predicted values in the May 2007 forecast.
- d. Monthly 2008 to-date actual kWh sales data by class, compared to the monthly predicted sales values in the rate case forecast (for 2008).

CA-IR-55

Ref: HECO-204 (Forecast Assumptions for 2009).

Please provide data and calculations supporting each of the stated input values for 2009, including LSFO price, personal income, jobs and the indicated nominal and real electricity price inputs that were employed by HECO.

CA-IR-56

Ref: HECO-WP-204, page 7 (Degree Day Historical Data).

Please provide a complete copy of any analyses performed by or for HECO to evaluate the question of whether any temperature trends exist that may justify utilization of a less than 30-year average to define "normal" weather. Does HECO acknowledge any trend in temperature?

CA-IR-57

Ref: HECO T-2, page 16, lines 4-6 (Adjustments for Customer Specific, PV, NEM and DSM Impacts).

Please provide complete copies of the analyses performed to quantify each of the adjustments that are referenced in testimony.

CA-IR-58

Ref: HECO T-2, page 20, lines 19-23 and page 24, lines 5-10 (Number of Customers projections).

Please provide complete copies of the input data and calculations performed to derive the proposed test year numbers of residential and commercial customers, as described in the referenced testimony.

Witness T-3 Mr. P. Young.

CA-IR-59

Ref: T-3, page 5, lines 12-14 (Schedule J KW billed Changes).

Please explain the methodology used by HECO to calculate the "percentage increase in kWb" arising from the approved Schedule J demand ratchet provisions and provide copies of studies and other data relied upon for this purpose.

CA-IR-60

Ref: T-3, page 5, lines 20-24. (Schedule R Inclining Blocks).

Please provide complete copies of all source data, studies and spreadsheet files (excel format) underlying the determination of test year sales volumes within each block of proposed Schedule R rates. In addition please explain and provide documentation for

each assumption made to allocate sales among rate blocks or to otherwise adjust billing determinants.

CA-IR-61 Please provide HECO-WP-302 in electronic Excel format, with all formulae intact, along with any linked spreadsheet files utilized to develop HECO-WP-302.

CA-IR-62 **Ref: HECO T-3, page 6, lines 4-6 (Rider Revenue Adjustments).**

Please provide, for the entire base year used to develop billing determinants for the test year, monthly billing records for each rider customer for which rider provisions impact test year revenues at present rates by \$25,000 or more.

Witness T-4 Mr. Sakuda.

CA-IR-63 **Ref: HECO T-4, page 3, line 8 (CIP CT-1 In Service Date).**

Please describe and provide documentation supporting each of the contractual performance and acceptance tests that are to be conducted on CT-1 systems in connection with its completion, availability for full power dispatch, release of final payments to vendors and commencement of any warranties periods.

CA-IR-64

Ref: HECO T-4, page 3, line 8 (CIP CT-1 In Service Date).

Please describe the current progress of construction, indicating each milestone date that has been established for project management in connection with the "target in-service date" and the corresponding achieved dates for actual completed tasks to-date.

Witness T-7 Mr. Giovanni.

CA-IR-65

Ref: HECO T-7, page 13, lines 2-6 (Cycling and Peaking Units).

Please describe and quantify the extent to which startups, run hours and capacity factors for HECO's cycling and peaking units are "expected to trend lower". Provide your results as expansions of HECO-709, HECO-710, and HECO-711 if possible.

CA-IR-66

Ref: HECO T-7, page 17, lines 19-22 (Utilization of DG Units).

Please explain why the commercial operation of CIP CT-1 cannot be expected to significantly reduce the need for dispatch of DG units. Provide copies of any documentation associated with your response.

CA-IR-67

Ref: HECO T-7, page 38 (Long Range Planning Schedule).

Please provide a complete copy of the most current available LRPS Excel workbook, as referenced in testimony.

CA-IR-68

Ref: HECO T-7, page 44, lines 5-24; HECO-WP-706 (Normalized Overhaul Schedule).

- a. Please provide a complete copy of all input data, spreadsheet analyses and explanations for each step of the development of the Normalized Planned Maintenance Schedule "PMS" as described in testimony.
- b. In addition, explain how the work scope and proposed test year cost of each normalized overhaul was determined in connection with the PMS normalization.

CA-IR-69

Ref: HECO T-7, Page 96, HECO-WP-707; (Normalized Planned Maintenance Schedule).

Please provide an electronic (Excel) file for HECO-WP-707 and explain how the calculations were performed and a "normalized cost for overhauls" was determined from such calculations, indicating each reason why "HECO decided not to adjust the test year estimated based on this difference."

CA-IR-70

Ref: HECO T-7, page 46, lines 4-12; HECO-720 (Power Supply Staffing).

- a. Please provide actual employment levels by calendar quarter, from December 31, 2007 to present, using the breakdown in HECO-720 (or indicate that "2007 Actual" is December 31, 2007 actual and add a column for June 30, 2008), explaining the status of HECO efforts to fill

any vacant positions or new positions required to reach staffing of 492 by year-end 2009.

- b. In addition, please state whether all 492 Rate Case TY 2009 positions were assumed filled throughout 2009 for development of test year labor cost estimates.

CA-IR-71

Ref: HECO T-7, page 50, lines 11-18 (Vacant Position Analysis).

Please explain why "the analysis that was presented in the HECO 2007 test year...is considered to be applicable to the present situation" and provide all updated information and supporting documentation relied upon to support this opinion.

CA-IR-72

Ref: HECO T-7, page 52, line 20 (24x7 Steam Unit Operations).

Please state whether HECO has been able to operate all of its steam-electric units on a 24 X 7 basis with historical staffing levels and indicate any dates within the past three years when 24 X 7 operations were not possible because of staffing deficiencies.

CA-IR-73

Ref: HECO T-7, page 53, line 5; HECO-724, HECO-729 (Overtime).

Please provide an expanded comparative spreadsheet of expensed and capitalized straight time, overtime and total productive labor hours for each RA within the Power Supply Process Area for each

year 2005, 2006, 2007, actual 2008 to-date and projected test year 2009.

CA-IR-74

Ref: HECO T-7, page 54, lines 15-17, page 98, lines 17-25; HECO-728 (Supplemental Labor).

Please provide a comparative spreadsheet of actual expensed and capitalized Company Labor and Supplemental Labor charged to each RA within the Power Supply Process Area for each year 2005, 2006, 2007, 2008 to-date and projected for the test year 2009, with explanations for any known events contributing to major fluctuations in such historical data.

CA-IR-75

Ref: HECO T-7, page 107; HECO-752, (Station Maintenance and Overhaul Trends).

Please provide detailed information by generating unit and station for the amounts shown for overhaul and station maintenance summarized costs in each year.

CA-IR-76

Ref: HECO T-7, pages 54-56 – (CIP CT-1 Staffing Plan).

- a. Please describe the initial and ongoing maintenance plans and provide the intervals of such maintenance for the new CT-1 unit, indicating the impact of any warrantee or inspection requirements, as well as the expected hot section, LP and other overhaul intervals.

- b. How will HECO time the hiring or transfer of the indicated 11 new station maintenance personnel to coincide with work activities?

CA-IR-77

Ref: HECO T-7 pages 55-56 (Vacant "Replacement" Positions).

Please complete the sentence at line 3 of page 56 and provide a detailed calculation of the avoided supplemental labor contractor charges, excessive overtime and all other avoided costs that were not included in the test year forecast because of HECO's assumption that, contrary to history, it will fill all of the vacant positions throughout 2009 with no vacancies.

CA-IR-78

Ref: HECO T-7, page 56, line 18; (Insulator – Honolulu Plant).

According to the testimony, "For the health and safety of personnel working at the Honolulu Power Plant, this new position will be dedicated to the repair and replacement of the deteriorating thermal insulation throughout the plant." Please provide the following information with respect to this position:

- a. Describe the types and amounts of thermal insulation work that has been done historically and indicate the labor hours and contractor hours incurred in each year 2002 through 2008, to-date for such efforts.

- b. Explain the events or facts that cause this issue to require a dedicated person now, but not in the past.
- c. Explain and quantify the amounts of historical supplemental labor or overtime costs that have not been recognized in the Company's rate filing because of the assumed filling of this new position.
- d. What is the total incremental non-labor cost included the test year associated with the implementation of this program and new position?
- e. What historically incurred amounts of non-labor cost were avoided (not included) in the test year because of the implementation of this program and new position?

CA-IR-79

Ref: HECO T-7, page 57, line 14; (New Overhaul Coordinator).

- a. Is it HECO's position that the added new position would be cost effective by improving overhaul performance and efficiency?
- b. If affirmative, please respond to the following:
 - 1. Provide specific reference into the Company's forecast workpapers where historically less efficient overhauls were projected to require fewer labor hours in the test year as a result of improved overhaul coordination.

2. Provide specific reference into the Company's forecast workpapers where historically less efficient overhauls were projected to require less non-labor contractor and other charges in the test year as a result of improved overhaul coordination.
3. Provide detailed calculations, using the information in your responses to subparts (1) and (2) of this information request, showing specifically where the cost savings anticipated from filling this new coordinator position have been recognized for the test year.

CA-IR-80

Ref: HECO T-7, page 62, line 7; (New PdM Specialist).

- a. Is it HECO's position that the added new position would be cost effective by improving predictive maintenance effectiveness or efficiency?
- b. If affirmative, please respond to the following:
 1. Provide specific reference into the Company's forecast workpapers where historically higher maintenance expenses were projected to require fewer labor hours or contractor charges in the test year as a result of improved PdM coordination.

2. Provide specific reference into the Company's forecast workpapers where the savings or increased charges to HELCO or MECO for PdM support can be observed to result in lower projected HECO net test year expenses.
3. Provide detailed calculations, using the information in your responses to subparts (1) and (2) of this information request, showing specifically where the cost savings anticipated from filling this new PdM specialist position have been recognized for the test year.

CA-IR-81

Ref: HECO T-7, page 62, line 12; (New O&M Engineer).

- a. Is it HECO's position that the added new position would be cost effective by improving engineering support for project effectiveness or efficiency?
- b. If affirmative, please respond to the following:
 1. Provide specific reference into the Company's forecast workpapers where historically higher maintenance expenses were projected to require fewer labor hours or contractor charges in the test year as a result of improved engineering support.

2. Provide specific reference into the Company's forecast workpapers where the operational savings from improved engineering support can be observed to result in lower projected HECO test year expenses.
3. Provide detailed calculations, using the information in your responses to subparts (1) and (2) of this information request, showing specifically where the cost savings anticipated from filling this new engineering position have been recognized for the test year.

CA-IR-82

Ref: HECO T-7, page 63, line 10 through page 65, line 10; (New O&M Services Positions).

- a. Is it HECO's position that any of the seven added new positions would be cost effective by improving administrative support for O&M project effectiveness or operational efficiency?
- b. If affirmative, please respond to the following:
 1. Provide specific reference into the Company's forecast workpapers where historically higher O&M expenses were projected to require fewer labor hours or contractor charges in the test year as a result of improved O&M Services support.

2. Provide specific reference into the Company's forecast workpapers where the operational savings from improved O&M Services support can be observed to result in lower projected HECO test year expenses.
3. Provide detailed calculations, using the information in your responses to subparts (1) and (2) of this information request, showing specifically where the cost savings anticipated from filling each of the seven new positions have been recognized for the test year.

CA-IR-83

Ref: HECO T-7, page 68, lines 1-25; (Five New Engineers).

- a. Is it HECO's position that the added five new engineering positions would be cost effective by improving engineering support for capital projects or O&M efficiency gains?
- b. If affirmative, please respond to the following:
 1. Provide specific reference into the Company's forecast workpapers where historically higher O&M expenses were projected to require fewer labor hours or contractor charges in the test year as a result of expanded staffing for engineering support.
 2. Provide specific reference into the Company's forecast workpapers where the operational savings or

capital savings from improved engineering support can be observed to result in lower projected HECO test year expenses.

3. Provide detailed calculations, using the information in your responses to subparts (1) and (2) of this information request, showing specifically where the cost savings anticipated from filling these five new engineering positions have been fully recognized for the test year.

- c. To what extent are the increased costs for added engineering positions capitalized in the test year forecast?

CA-IR-84

Ref: HECO T-7, page 77, lines 5-10; (Transmission Engineer Vacancies).

According to the testimony, "The short-term effects of these vacancies will be that work will continue to be contracted and projects will continue to be prioritized with some lower priority work deferred." Please provide an itemization of the "contracted work" that is referenced, by RA and FERC Account, indicating the comparable charges by RA and FERC Account that are included in the test year projections.

CA-IR-85

Ref: HECO T-7, page 89, HECO-738; (Training Efforts/Costs).

Please provide a monthly breakdown of the actual training costs incurred by HECO in 2007 and 2008, to-date, showing labor costs by position and non-labor costs by payee in each month.

CA-IR-86

Ref: HECO T-7, pages 113-114; HECO-WP-702; (Production M&S).

Please provide a monthly breakdown of Production M&S actual receipts, issuances, adjustments (if any) and balances by location/storeroom for each month of 2007 and 2008, to-date, explaining any unusual adjustments or transfers that significantly impact such balances in any particular month.

Witness T-8 Mr. R. Young.

CA-IR-87

Ref: HECO T-8, pages 4 & 8 (T&D Maintenance).

At page 4, the referenced testimony addresses "other equipment" used in the delivery of power to customers, including the following: "it is important in that the equipment is maintained on a periodic basis to ensure proper performance. With each new system addition there will be more equipment to maintain which results in higher maintenance spending." At page 8, four factors are described that contribute to increasing T&D O&M expense (i.e., more of the system; aging system; need to mitigate outages;

and higher cost of equipment, materials and services). Please provide the following:

- a. Please confirm that the importance of periodic maintenance and pressure on increasing maintenance spending, due to growth in facility investment and facility age as well as increasing unit costs, also applies to other transmission and distribution assets – such as overhead/underground lines, transformers, etc.
- b. If this cannot be confirmed, please explain.
- c. Have any regression studies or other analyses been prepared by, or for, the Company to evaluate the correlation between changes in transmission and distribution maintenance costs and:
 1. growth in T&D investment?
 2. growth in T&D circuit miles, number of transformers, etc.?
 3. increasing age of T&D plant and equipment?
- d. If the response to any of subparts (c1) through (c3) of this information request is affirmative, please describe each such study or analysis and provide a copy thereof in both hardcopy and spreadsheet format, with intact cell formulae.

Ref: HECO T-8, pages 5-8 (T&D Aging Infrastructure).

The referenced testimony generally discusses HECO's aging infrastructure and the increasing cost to maintain a growing and aging T&D system while providing reliable service. At page 5, the testimony cites to HECO-813 through HECO-816 in support of the aging infrastructure (i.e., overhead lines, underground lines and transformers). Please provide the following:

- a. Please confirm that the reference to increasing maintenance costs, as used in this context, would include both labor and non-labor costs, including outside contractors.
- b. If this cannot be confirmed, please explain.
- c. Please identify the specific NARUC expense accounts (as well as related activity and/or expense element, as appropriate), in which the cost to maintain the growing and aging T&D infrastructure would be recorded, for each of the following categories of infrastructure:
 1. 138kv overhead transmission lines;
 2. 138kv underground transmission lines;
 3. transmission transformers; and
 4. distribution substation transformers.

Ref: HECO T-8, page 5, HECO-813 & HECO-WP-806 (T&D Aging Infrastructure).

HECO-813 (138kv overhead transmission lines) is supported by HECO-WP-806, which breaks down circuit miles by age band for the 2009 forecast year. Please provide the following:

- a. Please confirm that the intent of HECO-WP-806 is to assign a particular circuit to the highest age band that the 2009 circuit age equals or exceeds the minimum age band value (e.g., a circuit would be assigned to the "30+" year band if the circuit would be 30 years old in the 2009 test year forecast).
- b. If this cannot be confirmed, please explain.
- c. Referring to HECO-WP-806, please explain why the circuit miles on lines 20-23 are assigned to the "20+" band when these circuits are shown as being 17-18 years in forecast 2009.
- d. Referring to HECO-WP-806, please explain why the circuit miles on lines 24-27 are assigned to the "15+" band when these circuits are shown as being 14 years in forecast 2009.

CA-IR-90

Ref: HECO T-8, page 5, HECO-814, HECO-WP-807 (T&D Aging Infrastructure).

HECO-814 (138kv underground transmission lines) is supported by HECO-WP-807, which breaks down circuit miles by age band for the 2009 forecast year. Please provide the following:

- a. Referring to HECO-WP-807, please explain why the circuit miles on lines 1-2 are assigned to the "15+" band when these circuits are shown as being 20 years in forecast 2009.
- b. Referring to HECO-WP-807, please explain why the circuit miles on line 5 are assigned to the "10+" band when this circuit is shown as being 15 years in forecast 2009.

CA-IR-91

Ref: HECO T-8, page 5, HECO-815, HECO-WP-808 (T&D Aging Infrastructure).

HECO-815 (transmission transformers) is supported by HECO-WP-808, which breaks down the 47 transformers by age band for the 2009 forecast year. Please provide the following:

- a. For nine (9) transformers (lines 1-3, 7, 22, 33, 44-46), columns (C) and (Q) show different dates of transformer replacement. For each of these transformers, please clarify whether multiple replacements have occurred or whether only one of the "dates" actually represents a transformer replacement.

- b. Referring to line 1, both replacement dates [i.e., columns (C) and (Q)] are in 2004. In the 2004 column, the transformer age restarts as "0", indicating new equipment. Please explain why lines 2, 3, 7, 22, 33, 44 and 46 do not similarly restart the age at "0" in the year of replacement.
- c. Referring to line 47, the CIP CT1 transformer is first listed in forecast 2009 with an age of "2" but the transformer is listed as "purchased" in 2007. Please provide the following:
 - 1. Was this transformer placed in service in 2007 or will it be first placed in service in 2009? Please explain.
 - 2. Should a "0" and a "1" be inserted into the 2007 and 2008 columns or should they remain "blank" with a "0" replacing the "2" in 2009 to reflect a 2009 in-service date? Please explain.
- d. With regard to the other 46 transformers (i.e., lines 1-46), is the year of purchase identical to the year the transformer was placed in service? Please explain.

CA-IR-92

Ref: HECO T-8, page 5, HECO-816 & HECO-WP-809 (T&D Aging Infrastructure).

HECO-816 (distribution substation transformers) is supported by HECO-WP-809, which breaks down the 273 transformers by age band for the 2009 forecast year. Please provide the following:

- a. Please confirm that only 5 of the 109 pre-1970 vintage (i.e., purchase dates ranging from 1935 through 1969) distribution substation transformers have been subsequently replaced. If this cannot be confirmed, please explain.
- b. Please confirm that, of the remaining 164 post-1969 transformers, 21 have been replaced and that 13 of those replacements were for transformers installed since 1985. If this cannot be confirmed, please explain.

CA-IR-93

Ref: HECO T-8, page 8, lines 16-23 (T&D Deferred O&M).

In a general discussion of historical needs to balance system reliability with financial constraints, HECO T-8 states: "There are times when HECO has to deliberately constrain spending, to the extent that it can do so without compromising reliability. However, such constraints in the level of spending can not continue for an indefinite period of time without eventually affecting reliability."

Please provide the following:

- a. Since 2002, please identify each instance of internal constraints being imposed on HECO's T&D maintenance due to financial limitations.
- b. Referring to each instance identified in response to part (a) of this information request, please provide the following:

1. The nature of the financial constraint or limitation, including the key factors contributing to that financial position.
 2. The reduction or constraint in T&D O&M spending that directly resulted from the factors identified in response to subpart (b1) of this information request. If available, please provide the amount of spending reduction by NARUC account, activity and expense element.
- c. Referring to the response to part (b) of this information request, are the identified financial constraints sufficiently past such that 2008 actual and 2009 forecast T&D spending is no longer constrained? Please explain.
- d. Did the identified financial constraints result in the deferral of necessary T&D O&M work such that the Company is now attempting to "catch-up" on the deferred work in 2008 or in the 2009 test year forecast? If so, please identify specific activities, projects and/or programs that are now in catch-up mode and provide the related costs in both periods.

CA-IR-94

Ref: HECO T-8, page 12, lines 3-10 (T&D Budget Process).

In describing how each department within the Energy Delivery Process Area develops its own budget and the O&M work required,

the referenced testimony states: "The level of work is based on a combination of the original equipment manufacturer's recommended maintenance cycles, inspections, number of units, units of work, historical trends, and is budgeted by staff with working knowledge of the maintenance requirements for HECO's facilities and the operation of the electric system. Starting with the estimate of the work planned for the year, the available labor resources (i.e., the staffing level and the associated productive man-hours) were allocated to perform this work for the year."

Please provide the following:

- a. Referring to HECO-800, HECO T-8 workpapers or the response of HECO T-8 to CA-IR-1 and CA-IR-2, please provide a pinpoint reference to the quantification of the specific work planned (or total demand required) for the 2009 test year forecast for each T&D department that has been based on "manufacturer's maintenance cycles, inspections, number of units, units of work, historical trends" or other labor resource requirements.
- b. Referring to part (a) of this information request, please provide a summary of the required O&M work planned, with copies of underlying support or citations to the source of the supporting data, if already supplied by HECO.

CA-IR-95

Ref: HECO T-8, pages 14-15 (T&D Over-Demand & Overtime).

In the context of discussing over-demand, the referenced testimony states: "Typically, overtime that is less than 12%-15% is acceptable; however working at this level of overtime for extended periods is not good for the employees because of the impact on their personal lives which then leads to morale issues." Please provide the following:

- a. Please explain the basis for the conclusion that overtime "less than 12%-15% is acceptable."
- b. Referring to part (a) of this information request, please provide a copy of any documents relied on in support of this conclusion.

CA-IR-96

Ref: HECO T-8, pages 14-15 & 18, HECO-825 (T&D Labor & Overtime).

In HECO's 2007 rate case (Docket No. 2006-0386), the Company provided straight time and overtime labor hours as well as composite O&M/capital ratios in response to CA-IR-104. Please provide comparable information as requested below:

- a. Please provide actual incurred straight time and overtime labor hours for each T&D department RA labor category for calendar years 2007 and 2008 to-date, as well as the comparable labor hour data included in the Company's 2008 budget and 2009 test year rate case forecast. [Note: This

request seeks total labor hours, not any allocation between O&M and capital accounts.]

- b. For each RA listed in response to part (a) of this information request, please provide the actual composite O&M/capital ratios in calendar years 2007 and 2008 to-date as well as the comparable O&M/capital ratio included in the Company's 2008 budget and 2009 test year rate case forecast.

CA-IR-97

Ref: HECO T-8, pages 17-18 & HECO-825 (T&D Staffing).

In HECO's 2007 rate case (Docket No. 2006-0386), the Company provided actual T&D monthly staffing levels, broken down by department by RA in response to CA-IR-100. Please provide comparable information as requested below:

- a. Actual monthly staffing levels for calendar years 2007 and 2008, to-date, with a further breakdown by department and RA.
- b. A monthly breakdown of the 2008 projected staffing levels, with a further breakdown by department and RA.
- c. A monthly breakdown of the 2009 test year forecast staffing levels, consistent with the monthly counts HECO seeks to include in setting rates, with a further breakdown by department and RA.

- d. Referring to part (a) of this information request, please supplement the 2008 actual staffing levels as additional monthly data becomes available.

CA-IR-98

Ref: HECO T-8, pages 17-20 (Vacant Positions).

Please provide the following:

- a. Please provide a monthly schedule for 2006 through 2008, to-date, showing both actual employee count and the number of authorized or approved positions by T&D department and RA.
- b. Please confirm that HECO's test year forecast assumes that the Company will fill all of the vacant T&D positions and maintain full employment throughout 2009 with no vacancies. If this cannot be confirmed, please explain.
- c. Please provide a detailed calculation of the avoided supplemental labor contractor charges, excessive overtime and all other avoided costs that were not included in the because of full employment assumption referenced in part (b) of this information request. If none, please explain.

CA-IR-99

Ref: HECO T-8, page 15, HECO-825 & HECO-829 (T&D Staffing & Outside Services).

At page 15, HECO T-8 generally refers to using contractors to perform some of the "over-demand" that cannot be met by HECO

employees working regular time and overtime. HECO T-8 also discusses outside service cost variances (e.g., see pages 30, 32, 39, 41, etc.). In HECO's 2007 rate case (Docket No. 2006-0386), the Company provided certain contract services costs in response to CA-IR-112. Please provide the following:

- a. Please supplement the vegetation management outside contractor information presented on HECO-829 (2003 through 2009 forecast) with "contract services other" data, comparable to the referenced response from HECO's 2007 rate case – adding vegetation management and other contract services costs charged to T&D O&M expense in 2008 to-date.
- b. Referring to part (a) of this information request, please further disaggregate contract services costs charged to T&D O&M expense in calendar years 2007 and 2008 (actual), as well as 2008 (budget) and 2009 test year rate case forecast as follows:
 1. segregate vegetation management contract services between transmission and distribution; and
 2. break down other contract services by department within the Energy Delivery Process Area.

CA-IR-100

Ref: HECO T-8, page 23 & HECO-WP-805 (T&D Variances - Vegetation Management).

Expense variance items E and K of HECO-WP-805 refer to "HECO-838 for details" regarding the increase in the scope of the vegetation management program. HECO's filing does not contain an exhibit or schedule identified as HECO-838. Please provide the following:

- a. Was HECO-838 inadvertently excluded from the Company's filing? If so, please provide a copy thereof.
- b. Did the Company decide to not include HECO-838 in its filing? If so, please explain why the referenced document was excluded.
- c. Please provide a copy of the information explaining the change in scope of the vegetation management program that was intended to have been included in HECO-838.

CA-IR-101

Ref: HECO T-8, page 33 (Vegetation Management).

The discussion of HECO's vegetation management program refers to a 2004 U.S.-Canada Power System Outage Task Force report (see footnote 5). Please provide a copy of this report.

Ref: HECO T-8, pages 36-39 & HECO-827 ("Wet Cycle" & Vegetation Management).

HECO-827 presents a historical comparison of Oahu precipitation data for calendar years 2000 through 2007 and 2008 through May.

Please provide the following:

- a. Please explain why the "normal" precipitation values were changed in 2006 for some weather locations (e.g., Hnl Ap, Waimanalo, Manoa Lyon, Poamoho and Waihee P).
- b. Regarding the weather locations referenced in part (a) of this information request, please provide a copy of the NOAA data supporting the original and revised "normal" precipitation values.
- c. The footnotes on HECO-827 indicate that the 2008 actual and normal precipitation values are for the period January through May 2008. Please update these columns for the most current information presently available and provide copies of the documentation supporting the actual and normal values.

Ref: HECO T-8, pages 35 & 37 (Vegetation Management).

At page 35, HECO's vegetation management program is stated to consist of: (i) Roadside, (ii) Right-of-Way and (iii) Customer/Emergencies. Referring to page 37, line 24, HECO

revised its roadside trimming priorities and techniques in January 2008. Please provide the following:

- a. Does the revision to roadside trimming represent the only change to HECO's vegetation management program in 2008?
- b. If not, please identify and describe the other material changes or revisions implemented in 2008.
- c. Referring to part (a) of this information request, were the revisions to the vegetation management program implemented in 2008 based on any particular studies or analyses prepared by, or for, HECO?
- d. If so, please identify and provide a copy of each such study.

CA-IR-104

Ref: HECO T-8, page 48 & HECO-WP-811 (OMS Amortization).

At line 18, HECO-WP-811 is identified as the support for the calculation of the \$432,000 OMS Amortization included in the 2009 rate case forecast. Referring to HECO-WP-811, the beginning deferred balance of \$4,256,425 as of August 2007 represents an input amount. Please provide the following:

- a. Please provide the amount of OMS expenditures, HECO overhead charges (if any) and AFUDC by month that comprises this beginning deferred balance.

- b. Referring to part (a) of this information request, please provide the requested information in spreadsheet file format, including the monthly AFUDC rates applied and all underlying algorithms.

CA-IR-105

Ref: HECO T-8, pages 52-54 (AMI Project).

- a. Have any cost/benefit studies been prepared by, or for, HECO for purposes of comparing the cost savings or other benefits HECO's customers might expect to realize from AMI deployment with the costs of implementing and rolling out AMI to the customers of HECO, HELCO and/or MECO?
- b. If so, please identify and provide a copy of each such study or analysis.

CA-IR-106

Ref: HECO T-8, pages 57-58 (T&D Training Costs).

The referenced testimony discusses additional CIS training costs in the amount of \$526,000. Please provide the following:

- a. Please provide additional documentation supporting the derivation of the \$526,000 forecast amount. If the requested information has already been provided by the Company (e.g., in response to CA-IR-2), please provide a pinpoint reference to the specific pages containing the requested information.

- b. If not provided in response to part (a) of this information request, please provide a breakdown of the \$526,000 by type of cost (e.g., training materials, outside trainer fees, travel, in-house labor, etc.).
- c. Please provide a monthly breakdown of the actual T&D training costs incurred by HECO during 2007 and 2008, to-date, showing labor costs by position and non-labor costs by payee.

CA-IR-107

Ref: HECO-WP-812 (T&D M&S).

HECO-WP-812, pages 3-4, contain monthly T&D stores issues and receipts. Please provide the following:

- a. Please provide a monthly breakdown of actual receipts, issuances, adjustments (if any) and balances by location/storeroom for each month of 2007 and 2008, to-date.
- b. Please identify and describe any unusual adjustments, transfers or large transactions that significantly impact such balances in any particular month (e.g., large issues in May and December 2007; large receipts in February and May 2007).

Witness T-9 Mr. Yamamoto.

CA-IR-108

Ref: HECO T-9, pages 10 and 14; (Temporary Positions for CIS).

Please provide a monthly breakdown by RA of the test year projected costs associated with the eleven temporary meter readers and three temporary customer service positions included by HECO and explain why such labor is necessary on a one-time basis for Phase 6 of CIS conversion, but not deferred as part of CIS program costs.

CA-IR-109

Ref: HECO T-9, page 18; July 1, 2008 HECO Notice in Docket No. 04-0268 (PEACE CIS Agreements and Breach).

Please provide a complete copy of the March 2006 agreement with PEACE and all correspondence between HECO and PEACE regarding the contract, including all demand letters, breach notifications non-termination notices and all amendment(s) of the March 2006 contract.

CA-IR-110

Ref: HECO T-9, page 18; July 1, 2008 HECO Notice in Docket No. 04-0268 (PEACE CIS Agreements and Breach).

Please state whether HECO ever considered termination of Peace US or the overall CIS project and describe the analysis that was performed and conclusions reached in connection with all consideration given to termination. Provide complete copies of all

reports, studies, workpapers, projections, analyses and other documents associated with your response.

CA-IR-111

Ref: HECO T-9, page 18; July 1, 2008 HECO Notice in Docket No. 04-0268 (PEACE CIS Agreements and Breach).

Please provide the following information:

- a. Summarize the rate base and operating expense costs that have been included in the Company's asserted revenue requirement in connection with the Peace CIS system and the related Bill-print, IVR and IWR services, by witness and HECO Exhibit.
- b. Explain how HECO plans to manage and account for the remaining uncertainties associated with project completion within the test year, in terms of potential further delays or partial implementation as well as increased costs of implementation.
- c. Explain whether and why HECO intends that the higher installed CIS system costs arising from problems with contractor performance should be charged fully to ratepayers?
- d. Provide a spreadsheet analysis of invoiced charges from Peace US to HECO/MECO/HELCO, indicating separately the amounts billed under the initial contract by date and amounts billed under the "revised payment schedule"

described at page 6 of the HECO July 1, 2008 CIS Notification Filing, also noting the amounts paid to-date by HECO and amounts for which payment has been withheld.

- e. Describe HECO's proposed rate case accounting for any withheld payments and other recoveries from Peace in connection with HECO's asserted damage claims.

CA-IR-112

Ref: HECO T-9, page 8, line 10; (Filling of vacant positions).

Please provide a detailed explanation of which elements of the company's "daily operations" it has been unable to adequately maintain at existing recent staffing levels that included several vacancies. Provide copies of all reports, analyses, workpapers, projections and other documents associated with your response.

CA-IR-113

Ref: HECO T-9, page 21; (Bill Print Outsourcing).

- a. Please provide a monthly detailed breakdown of HECO test year bill print costs, before and after commencing outsourcing in June 2009, indicating and quantifying where the anticipated economic benefits of outsourcing can be observed in these amounts.
- b. If existing equipment is to be retired/replaced, please identify the costs of that equipment and indicate where in the rate

filing related retirements and/or avoided operating expenses are recognized.

CA-IR-114

Ref: HECO T-9, pages 22-23; (IVR Outsourcing).

- a. Please provide a monthly detailed breakdown of HECO test year call center and IVR costs, before and after commencing outsourcing in 2009, indicating and quantifying where the anticipated economic benefits of outsourcing can be observed in these amounts.
- b. If existing equipment is to be retired/replaced, please identify the costs of that equipment and indicate where in the rate filing related retirements and/or avoided operating expenses are recognized.

CA-IR-115

Ref: HECO T-9, pages 22-23 (IWR Web Service Outsourcing).

- a. Please provide a monthly detailed breakdown of HECO test year internet support and IWR costs, before and after commencing outsourcing in 2009, indicating and quantifying where the anticipated economic benefits of outsourcing can be observed in these amounts.
- b. If existing equipment is to be retired/replaced, please identify the costs of that equipment and indicate where in the rate

filing related retirements and/or avoided operating expenses are recognized.

CA-IR-116

Ref: HECO-WP-905, Uncollectible Write-off Percentage.

Please provide the following information regarding the uncollectibles ratio proposed by HECO:

- a. Provide an updated electronic spreadsheet including all available actual months subsequent to December 2007.
- b. Explain all reasons why HECO believes that its uncollectible percentage has improved in 2004 through mid-2006 and then generally deteriorated, as shown on this table, indicating any changes in credit and collection policies or other initiative implemented to manage uncollectibles since September 2003.
- c. Has HECO changed any of its account write-off or recovery processes or accounting procedures since January 2003?
- d. If your response to part (c) of this information request is affirmative, please identify and describe each change and provide an estimate of the impact upon write-offs associated with each such change.

CA-IR-117

Ref: HECO-WP-902; (Customer Deposits).

Please provide the actual amounts of Customer Deposit balances by month for the period December 2007 to-date, for all available additional months.

CA-IR-118

Ref: HECO-WP-904; (Revenue Lag Days).

Please explain whether replacement of ACCESS with the new CIS system is expected to have any impact upon the Company's experienced billing or bill collection intervals, with an estimated of such impacts upon the Revenue Lag Day calculations set forth on this workpaper.

Witness T-10 Mr. Hee.

CA-IR-119

Ref: HECO T-10, page 18; HECO-1018 through HECO-1019 (HECO Administered DSM).

- a. Please provide, for all periods since inception of the program, a monthly detailed breakdown of installation volumes and costs incurred by HECO for each of the three programs SolarSaver ("SSP"), Commercial and Industrial Direct Load Control ("CIDLC"), and Residential Direct Load Control ("RDLC"), indicating HECO's average installed cost per participant historically, and the comparable average installed cost per participant in the projected test year.

- b. Explain any individually significant changes in program scope or cost evident upon comparing this data from year-to-year.

CA-IR-120

Ref: HECO T-10, page 18 (Dynamic Pricing Pilot DPP).

Please provide a detailed discussion and complete copies of the studies, reports, analyses, workpapers, projections and other data prepared by or for HECO to evaluate the scope and anticipated labor and non-labor costs of the proposed new DPP program.

CA-IR-121

Ref: HECO T-10, page 26; HECO-1016 (HECO Labor Needed for Retained DSM).

Please provide complete copies of all studies, reports, analyses, workpapers, projections and other documents relied upon by HECO to conclude that all of the existing "base" DSM positions will continue to be needed to support DSM programs not being transferred to third party administration.

CA-IR-122

Ref: HECO T-10, page 19 (CEP Analyst Position to Base Rates).

Please provide a detailed discussion and complete copies of any studies, reports, analyses, workpapers, projections and other data prepared by or for HECO to determine that the CEP Analyst position is "needed to support and perform budget analysis,

regulatory reporting, and contract administration tasks for the DSM programs that remain with the utility.”

CA-IR-123

Ref: HECO T-10, page 28; lines 12-24 (SBDLC Proposal).

Please provide a complete copy of the proposal received and provide the calculations indicating how “HECO has used the second vendor proposal as the basis for the Company’s estimates for SBDLC base non-labor expenses,” stating all assumptions made in this process.

CA-IR-124

Ref: HECO T-10, page 20; (Reclassified DSM Office Space).

Please provide a floor plan diagram of the office space proposed to be reclassified into base rates when DSM administration is moved to third party administration, indicating the specific employees presently housed in such space and marked up to indicate specific planned utility position utilization of such space in 2009 (who will be moved in to perform what functions in January 2009?).

CA-IR-125

Ref: HECO T-10, pages 54 and 55 (Energy Efficiency Advertising).

- a. Please explain all reasons why “[t]he Company still has a responsibility to continue to aggressively increase customer awareness of energy efficiency and conservation measures” after DSM administration is transferred and any continuation

of RCEA program funding is separately considered under third party administration.

- b. In addition, provide all available information to conclude that historical base rate allowed spending for energy efficiency advertising by HECO has been inadequate and should be increased.

CA-IR-126

Ref: T-10, page 57, HECO-1027 (Staffing Counts).

According to the testimony, "The test year employee count is 48, which is 3 more than the count as of March 31, 2008." Please provide the following:

- a. Please provide a monthly breakdown of actual staffing in each major area shown on HECO-1027, for each month of 2007 and 2008, to-date.
- b. Explain whether full employment (no vacancies) are assumed for the entire proposed staffing at 48 employees or state the specific vacancy assumptions that are used in the Company's rate filing.
- c. Provide the amounts of any temporary labor or contractor charges that were incurred by HECO to meet work requirement caused by any vacant Customer Solutions Area positions in 2006, 2007 or 2008, to-date.

Witness T-16 Mr. Okada.

CA-IR-127

Ref: HECO-WP-1501, page 2 (Payroll Tax Distribution).

Please provide the following:

- a. Copies of underlying reports and documentation supportive of the "Allocation of Payroll Taxes Based on Labor Dollars Charged."
- b. A comparative analysis of actual total payroll distribution percentages between Capital, Operations and Other, by NARUC Account, for calendar years 2006 and 2007.
- c. An explanation of significant changes in the payroll distribution between years, as set forth in your response to part (b) of this information request.

CA-IR-128

Ref: HECO-1601 (Revenue Taxes).

Please provide calculations of the proposed test year PSC tax, PUC fee and Franchise Royalty revenue tax items at present, current and proposed rates, since supporting calculations of such amounts are not set forth in WP-1601.

CA-IR-129

Ref: HECO-WP-1602, page 8 (DPAD Calculation).

- a. Please state whether the calculation of DPAD proposed for ratemaking conforms completely to the methodology

employed by HECO to calculate DPAD in its Federal tax return most recently filed.

- b. If any differences exist between ratemaking and tax return methodologies, please describe and quantify the impact of each such difference and explain why the ratemaking method is appropriate.

CA-IR-130

Ref: HECO-WP-1604 (Development & Amortization of State Capital Goods Excise Tax Credit).

Please provide a schedule showing the following actual data for all vintages through 2007 and estimated for 2008 and 2009:

- a. Capital expenditures generating the state capital goods excise tax credit;
- b. State capital goods excise tax credits generated in each year applying the four percent rate to the data provided in response to part (a) of this information request, indicating any adjustments made; and
- c. Calculations or bases for the amortization period chosen for each vintage.

CA-IR-131

Ref: HECO T-16, page 27, lines 5-8 (Excluded ADIT Items).

According to Mr. Okada's testimony, ADIT items excluded in the Commission's D&O 24171 were again excluded in the Company's filing. Please explain whether this treatment is any different from

the items excluded in settlement of Docket No. 2006-0386 and list and quantify the effect of each such difference.

CA-IR-132

Ref: HECO T-16, page 28, lines 17-20 (Simplified Service Cost Method).

According to Mr. Okada's testimony, "The IRS examination team reviewed HECO's mixed service costs, and they have denied HECO's refund claims related to the SSCM change in accounting method." Please provide copies of the correspondence and other documents associated with this "review" and "denial" and explain HECO's understanding of the potential for resolution of the disputed issues.

HECO T-22 Mr. P. Young.

CA-IR-133

Ref: HECO T-22, page 2, lines 13-22, (Cost of Service Changes).

- a. Aside from the agreements mentioned in testimony to present alternative distribution system classifications and to isolate production fixed/variable O&M, did HECO modify its approach to any other cost of service functionalization, classification or allocation methodologies relative to the approaches employed in the 2007 test year rate case?

- b. If affirmative, please identify and describe each changed approach and reference the exhibits where such changes can be observed.

CA-IR-134

Ref: HECO T-22, pages 16-17 (FERC Predominance Method).

According to the testimony, HECO did not perform a study of non-fuel production O&M expenses, but instead classified such costs using the FERC predominance method that was presented by the Consumer Advocate. Does HECO believe that the FERC predominance method is a more reasonable basis for classification of non-fuel production O&M expenses than HECO's previously applied 100% demand approach, in the absence of any more specific analysis of such expenses?

CA-IR-135

Ref: HECO T-22, page 18; HECO-2211 page 3 (2003 Load Study).

Please state whether the 2003 HECO Class Load Study is the most current available class load information for use in development of the cost of service allocation factors being used and explain HECO's plans for updating the Class Load Study.

CA-IR-136

Ref: HECO WP-2212 (Marginal Energy Cost Study).

Please provide a complete statement of all assumptions and supportive data underlying the Company's marginal energy cost analysis, as summarized on this workpaper.

CA-IR-137

Ref: HECO T-22, page 23 (New Schedule DS – Directly Served Commercial Customers).

In its last rate case, HECO agreed to, "design a separate rate class for customers who are directly served from a dedicated substation."

Please provide the following information regarding this proposal:

- a. A listing of these customers and their 2007 actual MWH sales.
- b. For each customer listed in your response to part (a) of this information request, state whether the substation from which the customer is served is dedicated solely to that customer.
- c. Explain whether/why the HECO cost of service study has (or has not) isolated and directly assigned substation investment costs for the new Schedule DS class.
- d. Provide the Company's best estimate of the gross and net plant investment that should be directly assigned to the Schedule DS customer class.

CA-IR-138

Ref: HECO T-22, page 23 (Commercial Customer Rate Options).

- a. The referenced testimony lists the rate options that remain available for commercial customers. Please provide copies of illustrative printed materials that are used by HECO to present and explain the various rate options that are available for commercial customers.
- b. If consultation with customers is also used as the primary tool to describe rate options, explain the approach taken by HECO and the analytic tools that are employed to present and explain the Company's remaining commercial rate options.

CA-IR-139

Ref: HECO T-22, pages 25 & 42 (Residential Time of Use Periods).

According to the testimony, HECO proposes to modify the Schedule TOU-R to employ only two daily use periods – with on-peak from 3pm to 8pm daily. Please provide the following information:

- a. Explain whether HECO considers this peak TOU period to be cost based.
- b. Provide copies of, or reference to, all studies, reports, analyses, workpapers, projections and other data relied upon in your response to part (a) of this information request.

- c. Describe how the estimated marginal energy costs on HECO-WP-2212 have been interpreted and applied in HECO's proposed price spread between on-peak and off-peak service periods under the proposed TOU-R (as stated by HECO T-22 on page 42).
- d. Explain the reasons why HECO believes it reasonable to "widen opportunities for residential customers to shift energy consumption to off-peak hours to create bill savings", particularly if the peak / off-peak pricing differentials are not entirely cost based.

CA-IR-140

Ref: HECO T-22, page 42 (Schedule TOU-R).

Please describe the Company's experience to-date with residential time of use rate offerings, including a discussion of promotional efforts, customer participation rates, customer impacts (savings), billing and administrative issues (if any) and HECO's expectations regarding future customer acceptance levels after CIS limitations are removed. Provide copies of any reports, analyses, projections and other documents prepared by or for HECO to evaluate its residential TOU rate offerings.

CA-IR-141

Ref: HECO T-22, page 42 (Proposed Schedule TOU-R Rates).

According to Mr. Young's testimony, "The proposed time-of-use charges are designed to create a greater cost differential and therefore a greater incentive for customers to move energy consumption off-peak." Please explain and provide copies of all studies, reports, analyses, projections and documents prepared by or for HECO to evaluate the TOU-R pricing options that were considered and that were relied upon to determine that greater cost differentials and a simplified rate structure are necessary and appropriate.

CA-IR-142

Ref: HECO T-22, page 42 (Schedule TOU-C).

Please describe the Company's experience to-date with commercial time of use rate offerings, including a discussion of promotional efforts, customer participation rates, customer impacts (savings), billing and administrative issues (if any) and HECO's expectations regarding future customer acceptance levels after CIS limitations are removed. Provide copies of any reports, analyses, projections and other documents prepared by or for HECO to evaluate its commercial TOU rate offerings.

Ref: HECO T-22, page 42 (Proposed Schedule TOU-G and TOU-J).

Please respond to the following regarding HECO's proposed TOU-G and TOU-J rates:

- a. Explain why the proposed TOU customer charges are no higher than proposed Schedule G and Schedule J rate customer charge levels, given the additional costs for TOU metering and billing.
- b. Explain why a simplified two-period TOU-R schedule is appropriate, while the commercial TOU rates retain the current three-period structure.
- c. Explain why the TOU-R schedule is believed to need "a greater incentive for customers to move energy consumption off-peak" which is contained in broadened price differences between periods, while the proposed commercial TOU rates have not been modified to provide such a "greater incentive."
- d. Regarding the TOU-J demand charge, how does HECO propose to avoid customer gaming of this provision, by intentionally establishing measured peak monthly maximum demands in the off-peak or mid-peak periods?
- e. Please explain and provide copies of all studies, reports, analyses, projections and documents prepared by or for HECO to evaluate TOU-G and TOU-J pricing options that

were considered and ultimately adopted within proposed rates.

CA-IR-144

Ref: HECO T-22, page 54 (Net Energy Metering Lost Margins).

According to Mr. Young's testimony, "There is no bill impact on non-NEM customers until HECO proposes and receives Commission approval to adjust rates upward to cover the NEM lost contribution to fixed cost." Please describe HECO's plan with regard to such a rate adjustment, indicating the authority for such rate adjustments, HECO's financial need for such incremental revenues and the basis upon which such adjustments would be calculated.

DOCKET NO. 2008-0083

HAWAIIAN ELECTRIC COMPANY, INC.

FOURTH SUBMISSION OF INFORMATION REQUESTS

Witness T-9 Mr. Yamamoto.

CA-IR-145 Ref: HECO-WP-901 (Customer Accounts Expense Variances).

Most of the variances on this workpaper are explained as related to the CIS project. Please provide a complete copy of the most detailed available recent/current business case analysis of the CIS project, indicating by year the incurred and anticipated expenses and capital investments, retirements, staffing changes, deferrals, amortizations and expected cost savings, as employed by the Company to evaluate the economics of the project. Include all available narrative reports and explanations associated with such calculations.

CA-IR-146 Provide complete copies of all of the documents prepared for or associated with presentations made to HECO for HEI senior management in 2007 or 2008, to-date, addressing the progress, status, cost or problems with new CIS system.

CA-IR-147 Provide complete copies of all of the documents prepared for or associated with presentations made to the HECO or HEI Board of

Directors in 2007 or 2008, to-date, addressing the progress, status, cost or problems with new CIS system.

CA-IR-148

What metrics are utilized by HECO management to measure and monitor the effectiveness and efficiency of customer service department processes and systems? Please provide specimen copies of each form of management report that is regularly prepared in the normal course of business to track and analyze performance in the customer accounting business area (meter reading, billing, remittance processing, call centers, etc.)

CA-IR-149

Ref: HECO-907 (Customer Information System Costs).

Please provide the following additional information regarding the projected CIS System Costs:

- a. A monthly breakdown of each line item amount on this Exhibit for 2009, isolating the labor and non-labor elements by RA.
- b. Projected monthly expenses in 2010 and all available periods thereafter for each line item by RA and expense element.
- c. Explain and quantify the Company's current and best view of how the monthly amounts shown in your response to

parts (a) and (b) above may be impacted by problems being experienced with CIS completion and implementation.

CA-IR-150

Ref: HECO T-9, page 17 (CIS System Benefits).

At page 17 of his testimony, Mr. Yamamoto describes the "expected benefits" from the new CIS system. Please provide the following information:

- a. Describe each of the customer accounting processes that are "currently performed manually," indicating the approximate number of employees by RA and annual labor hours involved in each of such manual efforts.
- b. Explain in detail and quantify where possible how improved integration with other new systems, such as Outage Management, ELLIPSE and HR Suite will simplify operations and save costs.
- c. Provide the Company's best estimate of the numbers of customer self-service transactions that are anticipated via the internet, indicating and quantifying, as possible, whether any significant employee headcounts and labor hour savings may be enabled by such self-service.
- d. Provide the approximate actual labor hours and non-labor expenses incurred by HECO in each of the years 2006, 2007 and 2008, to-date, by NARUC account associated with

licensing, operation, maintenance and enhancement of the existing ACCESS system.

- e. Provide an analysis of the projected test year Customer Accounts expenses, illustrating how each of the anticipated CIS benefits and terminating ACCESS system costs have been quantified within proposed test year amounts.

Witness T-14 Mr. Tamashiro.

CA-IR-151 **Ref: HECO T-14 page 8, & HECO-1404, page 2 (Community Service).**

Please provide a detailed breakdown of the \$361,000 of test year community service by activity.

CA-IR-152 **Ref: HECO T-14, page 9 (Corporate Sustainability Report).**

Beginning at page 9, the referenced testimony discusses the Corporate Sustainability Report, indicating that the work commenced in 2008. Please provide the following:

- a. Please provide a copy of the 2007 report.
- b. When does the Company expect that the current or next version of the report will be completed and available for distribution?
- c. Please provide the total cost to prepare, print and distribute the updated report and specifically identify the amount included in the 2009 forecast test year.

- d. Referring to the response to part (c) above, please breakout the amount of internal Company labor included therein, if any.
- e. Is this report the result of a regulatory requirement, legislative request or agreement to which the Company was a party? Please explain.
- f. Please explain the basis for the representation that this report will be an annual activity.

CA-IR-153

Ref: HECO T-14, page 11 (EEI Dues).

Please provide a copy of the actual 2008 EEI invoice information, including all attachments, which served as the basis for the 2009 test year estimate.

CA-IR-154

Ref: HECO T-14, page 12, & HECO-1404, page 5 (Ellipse Maintenance Fees).

Referring to HECO-1404, page 5, please provide the following:

- a. Please supplement HECO-1404, page 5, to reflect actual and budget amounts for calendar year 2008, clearly identifying budget values.
- b. Please explain and clarify whether the 2.5% increase in June 2009 is fixed by contractual commitment or represents HECO's estimate of the increase that might be imposed.
- c. For each listed amendment, please provide the following:

1. A detailed description of the purpose and scope of the amendment.
 2. An explanation as to why the scope covered by the amendment is beyond the Software Maintenance Fee (core business) or the BSI (payroll tax) software maintenance fee.
 3. The amendment start and termination date, if known (otherwise provide the estimated termination date).
- d. Amendment 34 is identified as a "proposed amendment for the projected additional maintenance costs beginning in 2008" in the amount of \$750,000 per month. Please provide the current status of this amendment and provide a copy of the amendment documentation.

CA-IR-155

Ref: HECO T-14, page 16, & HECO-1412 (Account 932 Maintenance).

Referring to HECO-1412, please provide the following:

- a. Please provide a detailed breakdown of the annual recurring maintenance estimate of \$681,000.
- b. Please provide a historical breakdown of Account 932 maintenance expense between "recurring" and "non-recurring" comparable to HECO-1412 by year for the period 2006, 2007 and 2008 to-date.

CA-IR-156

Ref: HECO T-14, page 16, & HECO-1412 (Account 932 Maintenance).

Referring to HECO-1412, please provide the following:

- a. Please explain the circumstances surrounding the Ward parking structure ramp repairs, including when the needed repairs were first identified and whether/why the repairs were scheduled for 2009.
- b. Please explain why the 2009 budgeted repair costs for the Ward parking structure ramp should not be considered capital projects.

CA-IR-157

Ref: HECO T-14, page 24 (EPRI Dues).

The 2009 estimate of EPRI dues employs a reallocation of the HECO-EPRI multi-year agreement based on the total R&D estimate in the most recent rate cases of HECO, HELCO and MECO.

Please provide the following:

- a. Please provide a copy of the multi-year EPRI agreement.
- b. Please provide a copy of the documentation supporting the reallocation that result in the HECO 2009 estimate of \$1,657,000.

Ref: HECO T-14, page 27 (R&D – New Technology – AMI).

The 2009 test year estimate for the AMI project of \$414,000 is comprised of \$291,000 for vendor/consultant fees and \$123,000 for base station leases. Please provide the following:

- a. The vendor/consultant fee estimates are based on prior vendor proposals and 2009 work scope cost estimates.
 1. Please identify and provide a copy of the "prior vendor proposals" relied upon for purposes of preparing the 2009 forecast.
 2. Has HECO actually contracted with the vendors and/or consultants that submitted the proposals reference in subpart (a)(1) above? Please explain.
 3. Please describe the current (August 2008) status and 2009 expected status of the vendor/consultant work envisioned by the referenced prior proposals.
- b. The lease rent estimate represents 2009 unit pricing for four Tower Gateway Base Stations in the test year.
 1. Has the Company actually executed a lease agreement and commenced making lease payments for these base stations? Please explain.
 2. Please provide a copy of the lease agreement.
 3. When did (or will) the Company take possession of the base stations? Please explain.

- c. Does the 2009 test year estimate of \$414,000 include an assumed escalation factor for the vendor/consultant or lease rental components? If so, please provide and explain the origin of the escalation rate, showing how such rate was employed in preparing the test year forecast estimate.

CA-IR-159

Ref: HECO T-14, pages 27-30 (R&D – New Technology – AMI).

The referenced testimony identifies the current status of eight (8) "project objectives" of the AMI R&D study. For each project objective which is identified as "on-going" or occurring in 2009, please provide the Company's best estimate of the test year cost.

CA-IR-160

Ref: HECO T-14, pages 32-34 (R&D – Maui Electric System Analysis).

At page 33, the Phase 1 work is expected to be completed in late 2008 with Phase 2 to commence in late 2008 and finished in 2009. Please provide the following:

- a. Does the Company expect to incur any of the \$75,000 Phase 2 costs in calendar year 2008? Please explain.
- b. Did the 2008 budget include any Phase 2 costs? If so, please explain and provide the amount thereof.
- c. Is there a "Phase 3" that is expected to commence after 2009? Please explain.

Ref: HECO T-14, pages 34-37 (R&D – Oahu Electric System Analysis).

At page 35, HECO T-14 indicates that the Oahu analysis will benefit from the Maui analysis, but the Oahu study will need to be tailored to the unique characteristics of HECO's electric system. At page 36, HECO T-14 states that "the current test year 2009 estimate of \$352,000 is primarily based on the Company's estimated Phase 1 costs of the Maui Electric System Analysis that I described earlier in my testimony." Please provide the following:

- a. As stated at page 34, please confirm that MECO's share of the Maui Electric System analysis was "in-kind" costs, as the technical lead, with HECO funding out-of-pocket costs of the Maui project. If this cannot be confirmed, please explain.
- b. Please confirm that HECO expects the entire \$352,000 estimate of the Oahu Electric System Analysis to be incurred during the 2009 forecast test year. If this cannot be confirmed, please explain.
- c. Please confirm that neither MECO or HELCO are participating in the funding of the Oahu Electric System Analysis, even through HECO will serve as the technical lead and MECO/HELCO will likely benefit from the findings of the Oahu study. If this cannot be confirmed, please explain.

- d. Please explain why neither MECO nor HELCO are participating in the cost of the Oahu Electric System Analysis.

CA-IR-162

Ref: HECO T-14, pages 34-37 (R&D – Oahu Electric System Analysis).

At page 36, HECO T-14 states that HNEI and USDOE cost sharing, which could be as high as 50%, will be available for this project. However, actual cost share will not be known until an agreement is finalized with HNEI. Please provide the following:

- a. Please describe the current status of the HNEI agreement discussions and indicate the anticipated time table for finalizing an agreement.
- b. Please confirm that HECO's 2009 forecast assumes 0% sharing from HNEI and USDOE. If this cannot be confirmed, please explain.

CA-IR-163

Ref: HECO T-14, pages 41-48 (R&D – Biofuel Co-Firing Project).

The 2009 test year projected cost of this project is \$649,000. At page 47, HECO T-14 states that this estimate was based on production engineering estimates. Please provide the following:

- a. Please provide a copy of the referenced production engineering estimates, including narrative discussions and underlying analyses.
- b. If not provided in response to part (a) above, please provide a detailed breakdown of the \$649,000 between work tasks, type costs or activities.

CA-IR-164

Ref: HECO T-14, pages 41-48 (R&D – Biofuel Co-Firing Project).

At page 46, HECO T-14 provides a breakdown of the costs of this project by calendar year, indicating that HECO has received over \$200,000 cost sharing from EPRI to-date. Further, additional cost-sharing will be sought "from EPRI in 2009 in the amount of the Company's contribution." Please provide the following:

- a. Is the \$200,000 amount received to-date associated with the costs incurred in 2007 and 2008?
- b. Please explain the statement that HECO will seek additional cost-sharing from EPRI in 2009 "in the amount of the Company's contribution."
- c. Referring to part (b) above, is it possible that HECO could receive 50% or 100% cost-sharing from EPRI? Please explain.
- d. When does HECO plan to commence the process of seeking additional cost-sharing from HECO? Please explain.

- e. Please confirm that HECO's 2009 forecast assumes 0% cost-sharing from EPRI. If this cannot be confirmed, please explain.

CA-IR-165

Ref: HECO T-14, pages 48-49 (R&D – Other Production Activities).

HECO T-14 describes the \$32,000 of R&D expense as related to a fuel cell facility license with HNEI, which allows HNEI to use approximately 4,000 square feet of warehouse space at HECO's Ward Avenue facilities for operation of the fuel cell test facility. The base license is month-to-month at a monthly rental of ten dollars (\$10), with the \$32,000 representing reasonable market rental for comparable facilities. Please provide the following:

- a. Please clarify whether HECO pays HNEI or HNEI pays HECO \$10 per month rent.
- b. Please explain the rationale underlying HECO's proposal to recognize \$32,000 in A&G expense related to 4,000 square feet of space located in its own facilities that are occupied by a third party.
- c. Has the Company recognized additional revenue in an amount equal to the \$32,000 expense charge? Please explain.
- d. Please provide a copy of the market rental study relied upon to determine that the \$32,000 rental rate is reasonable.

Ref: HECO T-14, pages 50-53 (Depreciation).

At page 52, HECO T-14 describes the depreciation rates applied in computing 2009 depreciation expense and states: "Composite rates were determined by calculating each group's depreciation accrual for 2008 and dividing it by the group's depreciable asset balance as of January 1, 2008. The 2008 depreciation accrual for each group was calculated by multiplying the depreciation rates for each account in the group by its respective depreciable asset balance as of January 1, 2008. See HECO-WP-1405." Please provide the following:

- a. The above quote appears to refer to two separate calculations. Please confirm. If this cannot be confirmed, please explain.
- b. Referring to HECO-WP-1405, please clarify which of the two calculations this workpaper represents.
- c. Please provide a copy of the spreadsheet file used in the calculation not represented by HECO-WP-1405.

DOCKET NO. 2008-0083

HAWAIIAN ELECTRIC COMPANY, INC.

FIFTH SUBMISSION OF INFORMATION REQUESTS

CA-IR-167

Ref: T-4, page 15.

Please provide the January through December 2007 load data, planned maintenance schedules, forced outages, fuel prices and unit characteristics that were used in the calibration model in electronic format.

CA-IR-168

Ref: T-4.

Please provide the energy generated by Generating Unit by month for 2007 and 2008 year-to-date.

CA-IR-169

Ref: T-4.

Please provide the actual monthly and annual heat rates, gross and net generation for each generating unit for each year for 2007 and 2008 year-to-date.

CA-IR-170

Ref: T4.

Please provide in electronic spreadsheet format the hourly output of the P-MONTH Production Simulation Model for each HECO unit, including purchased power.

CA-IR-171

Ref: HECO 402, WP-403, page 2.

Please provide a copy of any energy Loss Studies and other supporting documentation to support the energy losses shown in the referenced exhibit and workpaper.

CA-IR-172

Ref: HECO-WP-406, page 2.

- a. Please explain the tests or related data that was used to develop the Heat Rate Constants for each unit. Please provide a copy of the tests and related data.
- b. Please provide copies of all workpapers, analyses and source documents that support the information presented on this workpaper. The workpapers and analysis should set forth all computations, state all assumptions made in performing such calculations, and explain the basis for such assumptions.

CA-IR-173

Ref: T-5, page 6 and page 7, HECO 502, HECO-WP-502.

- a. Please provide the actual fuel prices for industrial fuel oil and diesel oil by month, since April 1, 2007.
- b. Please provide excerpts of pricing provisions for both industrial fuel oil and diesel fuel pursuant to the Chevron and Tesoro fuel contracts, as well as illustrative calculations, input value documentation and supporting market price or

index documentation for the Company's determination of test year unit prices. Please include taxes, ocean transportation, land transportation, petroleum terminalling and wharfage costs that are included to determine the delivered-to-plant price.

DOCKET NO. 2008-0083

HAWAIIAN ELECTRIC COMPANY, INC.

SIXTH SUBMISSION OF INFORMATION REQUESTS

CA-IR-174 **Ref: HECO-WP-414, page 1.**

Please explain columns I26 and X31. What are their titles and how are they used in the production simulation?

CA-IR-175 **Ref: HECO-WP-414, page 18.**

What is the Quick Load Pick Up Summary? Please explain how it is modeled and used in the Production Simulation Model.

CA-IR-176 **Ref: HECO Response to CA-IR-167.**

Please provide the P-Month input data files that were used in the 2007 Calibration Factor Report. Please provide the data files in excel format.

CA-IR-177 **Ref: HECO T-5, page 33.**

HECO T-5, page 33 refers to the December 2003 Fuel Inventory Study.

- a. Has a more recent Fuel Inventory Study been prepared?
- b. If yes, please provide the most recent Fuel Inventory Study.
- c. If no, have any of the following changed since the 2003 Study?

1. How long does it take for the tanker ship to travel from Indonesia to Oahu?
2. The capacities at each power plant?
3. How long does it take to arrange for an "unscheduled" tanker?
4. What is the average shipment volume of LSFO and Diesel fuel?

DOCKET NO. 2008-0083

HAWAIIAN ELECTRIC COMPANY, INC.

SEVENTH SUBMISSION OF INFORMATION REQUESTS

CA-IR-178

Ref: Response to CA-IR-48, page 7 (AMI Related Expenses).

Please confirm that no expenses or capital investment associated with the described advanced metering infrastructure ("AMI") project has been included in the projected test year revenue requirement or itemize all such included costs by witness, exhibit and IR-1/IR-2 workpaper reference:

CA-IR-179

Ref: Response to CA-IR-5, Annual Shareholders Report; page 4 (DSM Lost Margin/ Shareholder Incentives).

Please provide a summary of the annual pre-tax income realized by HECO in each of the past five years 2003 through 2007 for DSM lost margin compensation and for shareholder incentives, by NARUC Account, indicating the projected 2009 test year amounts for same (if any).

CA-IR-180

Ref: Response to CA-IR-5, Annual Shareholders Report; page 14 (HECO Energy Management and Outage Management Systems).

According to the Annual Report to Shareholders, "HECO installed a new Energy Management System in 2006 and completed a new Outage Management System in 2007." Please provide the

completed construction cost of each of these systems, as included within Plant in Service in the test year and explain and quantify where/if the anticipated operational savings and efficiencies of such systems are reflected in test year projected O&M expenses.

Witness T-2 Mr. Willoughby.

CA-IR-181 **Ref: Response to CA-IR-58, page 27 (Schedule F Customer Count).**

Please explain why the projected 2009 Schedule F customer count of 441 does not appear to correspond to any of the calculated model results in 2009 and provide calculations and documentation supportive of this 441 value.

CA-IR-182 **Ref: Response to CA-IR-58 (Customer Counts).**

Please provide comparable monthly actual number of customers' data by rate schedules for each available month of 2008.

Witness T-3 Mr. P. Young.

CA-IR-183 **Ref: HECO T-3, page 9 (Payment Protection Insurance).**

Please provide calculations and supporting documentation for all Payment Protection Insurance Program revenues and any expenses included within the Company's filing.

CA-IR-184

Ref: HECO T-3, page 9 (T&D Planning Cost Reimbursements).

Please provide a detailed statement of assumptions, calculations and supporting documentation for IPP interconnection and other T&D planning study revenues and expenses included within the Company's filing.

Witness T-7 Mr. Giovanni.

CA-IR-185

Ref: HECO WP-702, Response to CA-IR-86 (Production M&S Inventories).

Please describe each of the largest 10 (in total dollars) Power Supply inventory stocked items as of July 31, 2008 and explain the reasons for maintaining an inventory of such items as well as the historical frequency of issuances from stock for each item.

CA-IR-186

Ref: HECO WP-702, Response to CA-IR-86 (Production M&S Inventories).

Please provide a listing and total valuation for the production supply inventory items in stock at July 31, 2008 that had no issuances from stock in the prior 12 months, indicating why each of such items should not be considered obsolete or not useful in the normal course of business.

CA-IR-187

Ref: HECO T-7, page 113 (Spare Major Components).

- a. Does HECO maintain any production property units that are not in service and that are not recorded as materials and supplies in Account 154, such as rotatable spares or large pumps, fans, motors, valves or other major equipment?
- b. If your response to part (a) is affirmative, please provide a descriptive listing of such property units as of July 31, 2008 by NARUC Account and explain whether such assets should be (and have been) included in rate base and depreciation expense.

CA-IR-188

Ref: CA-IR-2, HECO T-7, Attachment 20 (PS O&M Program).

Please provide a comparable listing of actual station maintenance expense incurred in each of the years 2003, 2004, 2005, 2006, 2007 and 2008, to-date and describe the normal maintenance interval/cycle for each type of expenditure (tank cleaning/inspection, Basin Dredging, Asset Optimization, Pond Cleaning, boiler feed pump overhauls, turbine deck coating, etc.)

CA-IR-189

Ref: HECO-706 (Annual Capacity Factor by Class of Unit).

Please provide an expanded graph illustrating projected 2008, 2009 and 2010 data, so as to illustrate the anticipated impact of the new CT-1 unit.

CA-IR-190

Ref: HECO-709; Response to CA-IR-65 (Cycling Unit Service Hours).

Please provide an expanded graph illustrating projected 2008, 2009 and 2010 data, so as to illustrate the anticipated impact of the new CT-1 unit.

CA-IR-191

Ref: HECO-710; Response to CA-IR-65 (Waiau 9 & 10 Service Hours).

Please provide an expanded graph illustrating projected 2008, 2009 and 2010 data, so as to illustrate the anticipated impact of the new CT-1 unit.

CA-IR-192

Ref: HECO T-7, pages 51 and 56 (CIP Station Staffing Plan).

Please explain the process employed and provide copies of all documents associated with the development of operations and maintenance staffing plans for the new CIP station, including but not limited to assessments of Keahole station staffing experiences.

CA-IR-193

Ref: HECO-718 (Planned Maintenance Schedule).

Please provide the most current available detailed planned maintenance schedules for 2009, 2010, 2011 and 2012.

Ref: HECO Response to CA-IR-67 (Long Term Overhaul Plan).

Please confirm that this Excel file is the most current available long term generation maintenance plan and provide the following information:

- a. A copy of the current iteration of that plan, if updates are available.
- b. Explain how 2008 budget reductions were allocated to Power Supply and impacted the maintenance plan.
- c. Provide an estimate of cost savings in 2008 that were achieved by shifting Kahe 2 overhaul costs, as discussed with Mr. Giovanni on September 10, 2008.
- d. Confirm that major maintenance work on Waiau 3 is being deferred; pending a determination of future service life plans for the unit, and explain whether future retirement or cold standby of Waiau 3 is under consideration.
- e. Explain whether the planned overhaul work on Waiau 4 over the next two years is certain to occur and explain whether future retirement or cold standby of Waiau 4 is under consideration.

CA-IR-195

Ref: HECO-738 (Training Costs).

Please provide a monthly breakdown of actual labor and non-labor 2006, 2007 and 2008 year-to-date training expenses by ABM activity code and by RA.

CA-IR-196

Ref: CA-IR-2, HECO T-7, Attachment 3, page 1 (Production Labor Hours – Non-Project).

Please provide, for each of the listed RAs with more than 7,200 projected "Total Hours" in the 2009 test year, a comparative spreadsheet showing actual hours charged by activity in each of the years 2005, 2006, 2007 and 2008 year to-date, compared to the test year projected hours by activity (see CA-IR-1, Attachment 11L, page 9 for an example of the format desired). Explain each instance where projected labor hours by activity are significantly different than historical work requirements for that activity.

CA-IR-197

Ref: HECO-WP-707, page 3; Normalized O'haul Exp Matric.xls (Overhaul Normalization Input Costs).

Please provide the following information associated with the annual overhaul input cost data:

- a. Source data for the recorded costs of each overhaul in the years 2003 through 2007.

- b. Explanations, source data and supporting calculations for each adjustment made to the recorded data in your response to part (a), including but not limited to comments in the right margin.
- c. Data and calculations needed to reconcile the Budget 2009 overhaul cost data shown in HECO-WP-707 into corresponding CA-IR-1 and CA-IR-2 data for HECO T-7.
- d. State the starting date and ending date for each of the "recorded" overhauls in the years 2003 through 2007.
- e. Explain whether the W9 outage in 2004 is viewed as representative of a normal scope of work for planned CT overhauls and provide supporting documentation for your response. Provide an estimated quantification for any elements of the work scope that were unusual and beyond the scope of normally anticipated overhaul work.
- f. Explain whether the W10 outage in 2006 is viewed as representative of a normal scope of work for planned CT overhauls and provide supporting documentation for your response. Provide an estimated quantification for any elements of the work scope that were unusual and beyond the scope of normally anticipated overhaul work.
- g. Provide the insurance credit amounts that are referenced in footnote #5 and explain whether these cost reductions are

viewed as proper normalizing adjustments for the W9 and W10 forced outages to make them representative of normally scoped planned overhauls.

- h. Explain whether the W10 outage projected for 2009 is viewed as representative of a normal scope of work for planned CT overhauls and provide supporting documentation for your response.
- i. Provide comparable data required to add 2002 into the recorded data and explain each reason why 2002 was excluded when HECO prepared the analysis.

CA-IR-198

Ref: CA-IR-2, HECO T-7, Attachment 11D, pages 2 and 3 (RA=PIK Kahe Operations Non-labor charges).

Please provide, for each listed 201 and 501 line item (including all HPxxxxxx codes) comparable 2006, 2007 and year-to-date 2008 actual expenses and an explanation for any individually significant changes in projected 2009 expense levels relative to such historical spending. In addition, explain how the RO Water conversion project was considered in the development of test year estimated water and water treatment costs.

CA-IR-199

Ref: CA-IR-2, HECO T-7, Attachment 11K, pages 2 and 3 (RA=PIW Waiau Operations Non-Labor Charges).

Please provide, for each 201 and 501 line item (including HPxxxxxx codes) comparable 2006, 2007 and year-to-date 2008 actual expenses and an explanation for any individually significant changes in projected 2009 expense levels relative to such historical spending

CA-IR-200

Ref: CA-IR-2, HECO T-7, Attachment 11C, pages 2 and 3 (RA=PIH Honolulu Operations Non-Labor Charges).

Please provide, for each listed 201 and 501 line item (including HPxxxxxx codes) comparable 2006, 2007 and year-to-date 2008 actual expenses and an explanation for any individually significant changes in projected 2009 expense levels relative to such historical spending.

CA-IR-201

Ref: CA-IR-2, HECO T-7, Attachment 11A, page 2 (RA=PIB Non-Labor Charges).

Please provide historical actual annual expenses for each year 2003 through 2008, to-date, for each of the following expense elements included in the 2009 forecast and explain why increased spending is reasonable with documentation in support of increased costs where applicable:

- a. Outside Consulting/Mtce Fees \$167,040 in 2009.
- b. Department Computer Software \$94,000 in 2009.

- c. Info Tech Misc. Computer Equip. \$42,600 in 2009.

CA-IR-202

Ref: CA-IR-2, HECO T-7, Attachment 11K, page 2 (RA=PIW Non-Labor Charges).

Please provide historical actual annual expenses for each year 2003 through 2008, to-date, for each of the following expense elements included in the 2009 forecast and explain why increased spending is reasonable with documentation in support of increased costs where applicable:

- a. LPG, Lube Oil Diesel \$97,200 in 2009.
- b. Blr Oper Supplies \$250,800 in 2009.
- c. Protective Equip. \$20,400 in 2009.

CA-IR-203

Ref: CA-IR-2, HECO T-7, Attachment 13, pages 5 and 6 (RA=PYE Non-Labor Charges).

Please provide historical actual annual expenses for each year 2003 through 2008, to-date, for each of the following expense elements included in the 2009 forecast and explain why increased spending is reasonable with documentation in support of increased costs where applicable:

- a. Monitor Plant/Operational Perf-Boiler \$13,000 in 2009.
- b. Monitor Plant/Operational Perf-Boiler \$9,000 in 2009.
- c. Monitor Plant/Operational Perf-Boiler \$50,000 in 2009.

CA-IR-204

Ref: CA-IR-2, HECO T-7, Attachment 11H, page 2 (RA=PIO Non-Labor Charges).

Please provide historical actual annual expenses for each year 2003 through 2008, to-date, for the Clean Island Council and provide supporting documentation and explanations for the \$160,800 included in the 2009 forecast for this item.

CA-IR-205

Ref: CA-IR-2, HECO T-7, Attachment 11H, page 4 (RA=PIM Non-Labor DG Unit Charges).

Please provide historical actual monthly expenses for each applicable month in 2006 through 2008, to-date, in the format of the "2008-09-10 Dist Gen and Customer DSG O&M Budget" and explain any unusually large DG cost element changes that are projected for the 2009 test year.

CA-IR-206

Ref: HECO-741; Response to CA-IR-66 (Distributed Generator O&M Expenses).

Please explain HECO's efforts to-date to convert DG unit lease terms to year-to-year and to achieve flexibility to reduce the financial commitment to DG after commercial operation of CT-1, indicating the Company's current plans for future DG operations.

CA-IR-207

Ref: CA-IR-2, HECO T-7, Attachment 11M, pages 2 and 3 (RA=PIY Non-Labor CIP CT-1 Unit Charges).

Please provide a detailed statement of assumptions and supporting calculations and documentation for the projected 2009 CT-1 operating expenses.

CA-IR-208

Ref: CA-IR-2, HECO T-7, Attachment 11N, pages 2 to 9 (RA=PIZ Non-Labor CIP CT-1 Unit Charges).

Please provide a detailed statement of assumptions and supporting calculations and documentation for the projected 2009 CT-1 maintenance expenses.

CA-IR-209

Ref: CA-IR-2, HECO T-7, Attachment 11L, page 3 (RA=PIX Non-Labor Charges).

Please provide historical actual annual expenses for each year 2003 through 2008, to-date, for each of the following expense elements included in the 2009 forecast and explain why increased spending is reasonable with documentation in support of increased costs where applicable:

- a. GENERAL TREND \$396,000.
- b. Protective Equip A&G \$60,000.

CA-IR-210

Ref: CA-IR-2, HECO T-7, Attachment 11E, page 6 (RA=PIL Non-Labor Charges).

Please provide historical actual annual expenses for each year 2003 through 2008, to-date, for each of the following expense elements included in the 2009 forecast and explain why increased spending is reasonable with documentation in support of increased costs where applicable:

- a. Gen Plant - Trend \$108,000.
- b. Gen Plant - Trend \$156,000.
- c. Gen Plant - Trend \$144,000.
- d. Gen Plant - Trend \$216,000 (Com Struc).
- e. Gen Plant - Trend \$300,000.
- f. Gen Plant - Trend \$216,000 (Trb Gen).

CA-IR-211

Ref: CA-IR-2, HECO T-7, Attachment 11J, Tab 33 (Waiau 10 Voltage Regulator Upgrade).

Please explain with specificity what work is proposed on the W10 voltage regulator, indicating the equipment to be replaced at each unit 9 and 10 and explaining why the costs are not capital in nature. In addition, provide copies of all correspondence, contracts and invoices for similar equipment purchased and installed by HECO at any other units.

CA-IR-212

Ref: CA-IR-2, HECO T-7, Attachment 7A, pages 4 and 5 (EMIS Air Quality Module).

Please explain the status of HECO plans to implement the Air Quality Module of EMIS and provide copies of documents indicating management's commitment to these expenditures.

CA-IR-213

Ref: CA-IR-2, HECO T-7, Attachment 7B, page 4 (Emission Fees).

Please explain the basis for inclusion of the 5 percent contingency adder and provide copies of the most recently submitted fee calculations on Form F-1 and associated fee payments for each station.

CA-IR-214

Ref: HECO-740, CA-IR-2, Attachment 7D, page 4 (Environmental 316b Expenses).

Please update the discussion within HECO-740 for any changed circumstances and provide the following information in support of the proposed \$848,000 in 316b evaluation, monitoring and reporting efforts projected for 2009:

- a. A copy of relevant Tenera, EPRI and other vendor proposals, contracts, scope of work definitions, correspondence and other data supportive of proposed 2008 and 2009 expense amounts.
- b. Actual monthly expenditures to-date by vendor, in the format of Table 1 at HECO-740, page 5.

- c. The most detailed available timeline describing HECO's planned 316b activities and deliverable work products for the remaining months of 2008 and throughout 2009.
- d. Projected monthly 316b expenditures in 2009, by vendor, in the format of Table 1 at HECO-740, page 5.

CA-IR-215

Ref: HECO T-7 pages 93 and 94, CA-IR-2, Attachment 17, page 3 (Competitive Bidding Contractors).

Please provide the following information in support of the proposed \$450,000 in consultant/observer charges and \$270,000 in outside legal services for 2009 competitive bidding:

- a. A copy of the RFP that was issued by HECO for initial competitively bid renewable resources.
- b. A descriptive listing of the proposals received by HECO in response to the RFP referenced in part (a).
- c. The most detailed available timeline describing the estimated bid evaluation, interconnection analysis, contract negotiation, PUC application and each other identified step in the planned competitive bidding process.
- d. HECO's actual incurred consultant, observer and outside legal service expenses by month and RA for 2007 and 2008 to-date associated with the pending renewable round 1 competitive bidding process.

- e. Estimated future monthly expenses associated with the pending renewable round 1 of competitive bidding in the remainder of 2008, 2009 and 2010 on a comparative basis to your response in part (d).
- f. Explain the work activities required in each month in connection with consultant, observer and legal services contained in your response to parts (d) and (e) of this information request.
- g. Provide information comparable to parts (c) through (e) for the HECO Firm Capacity RFP described at HECO T-7, page 94, lines 4 to 7.
- h. Provide information comparable to parts (c) through (e) for the HECO Second Round Renewable Capacity RFP described at HECO T-7, page 94, lines 8 to 13.
- i. Explain with specificity the activities and identify the specific contractors supporting the \$225,000 of outside legal for new PPA contracts expenses included under RA=PIC in Attachment 12, page 5.
- j. Explain with specificity the activities and identify the specific contractors supporting the \$295,464 of EE=901 administration of firm capacity contracts expenses included under RA=PYA in Attachment 13, page 2.

Witness T-8 Mr. R. Young.

CA-IR-216

Ref: HECO T-8, pages 52 to 54 (AMI Project).

The referenced testimony describes the proposed AMI project. At page 53, HECO T-8 refers to HECO T-14 for a discussion of the Company's pilot AMI R&D projects (\$414,000 2009 test year expense); to HECO-1 regarding plans for full-scale AMI project roll-out, and indicates that 6,680 AMI meters had been installed as of February 2008. At page 54, HECO T-8 provides a breakdown of the \$853,224 estimated AMI project costs included in the 2009 T&D O&M forecast. Please provide the following:

- a. Please provide a current count of the AMI meters installed to-date in 2008.
- b. Please provide the installed cost of the AMI meters, by year of addition.
- c. Referring to parts (a) and (b) above, please provide the additional AMI meters and related plant investment (i.e., above "current" actual levels) HECO has included in the 2009 forecast test year.
- d. Please provide the meter retirement journal entries (e.g., credit to plant and debit to accumulated depreciation) recorded, by year of retirement, as a result of the installation of the AMI meters referenced in parts (a) and (b) above.

- e. Referring to part (d) above, please provide the additional meter plant retirements (i.e., above "current" actual levels) HECO has recognized in the 2009 forecast test year.

CA-IR-217

Ref: HECO T-8, pages 52 to 54, & HECO T-8 Response to CA-IR-1, Attachment 2 (AMI Project).

The referenced testimony describes the proposed AMI project. At page 54, HECO T-8 provides a breakdown of the \$853,224 estimated AMI project costs (i.e., \$261,079 labor, \$426,516 outside services, and \$165,629 overheads) included in the 2009 T&D O&M forecast. Please provide the following:

- a. Referring to page 2 of the response CA-IR-1, Attachment 2, HECO describes four vacancies (as of July 10, 2008) in the Customer Installations Department (2 AMI systems engineers and 2 AMI project managers). Are these the only positions that comprise the \$261,079 labor amount? Please explain.
- b. Referring to part (a) above, please describe the current status and expected time line for filling each identified position.
- c. Referring to part (a) above, please provide a copy of the job description for each identified position. If no job description yet exists, please provide a detailed description of the expected responsibilities and duties of each position.

- d. Is it anticipated that each identified position will be filled by new hires from outside the Company or by transfers from other positions/departments? Please explain.
- e. Referring to CA-IR-1, Attachment 2, pages 5, 18, 20 and 21, please provide a calculation of the \$261,079 labor cost, using the identified labor hours by RA/Labor Class, applicable standard labor rates and HECO allocation factor (67.5%).
- f. Referring to CA-IR-1, Attachment 2, pages 18, 20 and 21, the "Labor Class" field is illegible on the workpaper supplied by the Company. Please provide the appropriate labor class for each position.

CA-IR-218

Ref: HECO T-8, pages 52 to 54 (AMI Project).

The referenced testimony describes the proposed AMI project. At page 54, HECO T-8 provides a breakdown of the \$853,224 estimated AMI project costs (i.e., \$261,079 labor, \$426,516 outside services, and \$165,629 overheads) included in the 2009 T&D O&M forecast. Please provide the following:

- a. Does the \$165,629 of overheads represent on-costs? Please explain.
- b. If the response to part (a) above indicates that the overheads do not represent on-costs, please provide a

detailed breakdown of the elements or components comprising the \$165,629 overhead amount.

CA-IR-219

Ref: HECO T-8, pages 52 to 54, & HECO T-8 Response to CA-IR-2, Attachment 7B (AMI Project).

The referenced testimony describes the proposed AMI project. At page 54, HECO T-8 provides a breakdown of the \$853,224 estimated AMI project costs (i.e., \$261,079 labor, \$426,516 outside services, and \$165,629 overheads) included in the 2009 T&D O&M forecast. Referring to pages 5 and 6 of Attachment 7B, the outside service estimate represents regulatory support costs (i.e., legal \$74,630; consultant \$351,892). Please provide the following:

- a. Please provide a detailed explanation of the specific regulatory support (e.g., obtaining regulatory approval of the yet to be filed AMI application) for which legal services are expected to be required for the AMI project in 2009.
- b. Please provide a detailed explanation of the specific regulatory support for which outside service consulting resources are expected to be required in 2009.
- c. Does the 2009 rate case forecast anticipate large scale AMI deployment? Please explain.

Ref: HECO T-8 Response to CA-IR-2 (T&D – Transfer of Overdemand to O/S).

Various non-labor workpapers provided in response to CA-IR-2 (e.g., see Attachment 12A) refer to the transfer of overdemand to outside services ("O/S"). Please provide the following, in both hard copy and spreadsheet file formats:

- a. Please provide a copy of the resource leveling reports, or other related documentation, showing the original T&D labor hours for the 2009 rate case forecast before the transfer of labor "overdemand" to outside services.
- b. Please provide a copy of the resource leveling reports, or other related documentation, showing the revised T&D labor hours for the 2009 rate case forecast after the transfer of labor "overdemand" to outside services.
- c. Referring to parts (a) and (b) above, please summarize the "overdemand" labor hours transferred to outside services.
- d. Referring to part (c) above, please provide detailed forecast documentation showing the derivation of the hourly contracting rate(s) and how such rate(s) were used to price out the "overdemand" labor hours transferred to outside services. [Note: The response should support and reference the amounts identified as "transfer of overdemand to O/S" in the response of HECO T-8 to CA-IR-2.]

Witness T-9 Mr. Yamamoto.

CA-IR-221

Ref: HECO T-9, page 17 (CIS Project Costs and Benefits).

Please provide, in electronic Excel format and hard copy, the following documents that have been prepared by or for HECO to evaluate and compare the CIS project costs to anticipated benefits:

- a. The initial overall economic analyses prepared for presentation to the Commission in support of HECO's application for approval of the CIS project.
- b. Each economic analysis prepared after the initial application to the Commission that was subsequently presented to the commission in either detailed or summary form.
- c. The most recent available economic analysis prepared for the use of Company management to evaluate how project costs and benefits have changed as a result of project delays and cost increases that have occurred.

CA-IR-222

Ref: HECO T-9, page 21 (Bill Print Outsourcing Costs and Benefits).

Please provide, in electronic Excel format and hard copy, the February 2007 economic analysis and business case prepared by or for HECO to evaluate the economics of outsourcing bill printing and distribution functions, as well as the most recently updated analysis/business case addressing this matter.

CA-IR-223

Ref: Response to CA-IR-2, HECO T-9, Attachment 2, page 3 (Contract Bill Print Costs).

Please provide a complete copy of the outsourcing contract for bill print services and explain whether HECO is obligated under the contract to continue to separately pay for envelopes, postage or bill forms after contract bill print services are commenced at the indicated monthly rate of \$45,951 to HECO.

CA-IR-224

Ref: Response to CA-IR-2, HECO T-9, Attachment 2, page 12 (Checkfree Costs).

Please provide a copy of the new pricing arrangement with Checkfree that was discussed with Mr. Yamamoto on September 11, 2008 and a calculation of the revision to \$106,119 amount shown to incorporate such new prices.

CA-IR-225

Ref: Response to CA-IR-2, HECO T-9, Attachment 2, page 16 (ITS Department IVR/IWR Model).

Please provide a complete electronic copy of the entire Excel file and all linked files from which this spreadsheet was prepared, along with an explanation of each of the "scenarios" that can be evaluated with the model, including but not limited to "Scenario 3."

CA-IR-226

Ref: Response to CA-IR-2, HECO T-9, Attachment 2, page 33 (Postage Costs).

Please provide monthly actual HECO mailed bill counts and related expense amounts for all available months of 2007 and 2008, to-date.

CA-IR-227

Ref: HECO Response to CA-IR-45 (CIS Business Case).

Please confirm that HECO has done no further work since August of 2004 to update and revise its CIS project business case analysis (in spite of significant delays and projected cost increases) or provide complete copies of the most current iteration of such work, as initially requested in CA-IR-45.

Witness T-10 Mr. Hee.

CA-IR-228

Ref: HECO Response to CA-IR-121, page 4 (HECO Base Position Hours Distribution).

For each of the five listed DSM base positions, provide the same breakdown of labor hours by program for calendar 2007 and for the first half of calendar 2008.

CA-IR-229

Ref: HECO-1012 (DSM Expenses).

Please explain whether (and why or why not) HECO is proposing any continued use of IRP/DSM surcharge recovery and deferral accounting for its future DSM (load control) program costs and

DSM administration and planning costs after energy efficiency programs are transferred to the PBF administrator. Provide all available details for tariff terms and accounting provisions that are proposed.

CA-IR-230

Ref: HECO-1017 (DSM Program Costs).

Please provide this exhibit with two additional columns added indicating budgeted 2008 labor and non-labor costs by program and comparable actual year-to-date August 2008 costs by program.

CA-IR-231

Ref: HECO T-10, page 28 (SBDLC Program).

Please explain and quantify how HECO has acted to "scale down" the program and provide a copy of vendor agreements and work plans associated with the small business direct load control program, indicating any adjustments that should be made to HECO's budgeted test year expense levels for SBDLC.

CA-IR-232

Ref: HECO T-10, pages 31 and 32 (DSM Related Expenses).

Please state and explain all of the Company's current plans regarding management of the transition of DSM to the PBF administrator:

- a. Describe, for each element of DSM related expenses (staffing, facilities, information technology, contract

personnel, consulting, etc.), the steps that have been or will be taken to adjust such costs for functions to be undertaken by the PBF administrator.

- b. Explain whether/how test year projections have reflected such adjustments.
- c. If HECO becomes a sub-contractor to the PBF administrator, what amount of projected annual test year costs will become billable or recoverable from PBF sources?

CA-IR-233

Ref: HECO T-10, pages 54 to 56 (Conservation Advertising Expenses).

Please explain each reason why HECO cannot continue conservation advertising within the RCEA framework, subject to review, approval and oversight by the Commission and with future funding through the PBF administrator, if such advertising is deemed necessary. Provide copies of all studies, reports, analyses, projections and other documents associated with or supportive of your response.

CA-IR-234

Ref: Response to CA-IR-2, HECO T-10, (IRP Incremental Costs).

Please provide the spreadsheets used to compile test year and prior years' base and incremental IRP expenses, as discussed with Alan Hee on September 11, 2008.

Witness T-11 Ms. Nanbu.

CA-IR-235

Ref: HECO-WP-1115 (PEZ Allocations of Information Technology Expenses).

Please provide the PEZ Model 04-30-08 RC.xls electronic file and every other available electronic spreadsheet file that is associated with test year information technology expense development or allocation or with HECO-WP-1115.

CA-IR-236

Ref: HECO-1115, pages 2 and 3 (Information Technology).

For each line item of projected test year IT expense that contributes to the total of \$17,365,616, please provide comparable actual expenses incurred in 2006, 2007 and year-to-date 2008 and explain each individually significant change in expense levels in the test year, relative to these recent years.

CA-IR-237

Ref: HECO T-11, pages 19 to 21, & T-11 Response to CA-IR-2, Attachment 27 (Internal Audit Consulting Fees).

The 2009 forecast includes \$750,000 for additional consulting fees to assist in conducting various audit activities previously performed by HECO's internal audit staff prior to 2004. Please provide the following:

- a. Referring to Attachment 27 of the response of HECO T-11 to CA-IR-2, please explain how the \$750,000 forecast estimate was determined.

- b. Referring to Attachment 27 of the response of HECO T-11 to CA-IR-2, please explain why the Attachment 27 workpapers do not contain any documentation supporting the basis for or derivation of the \$750,000 forecast amount.
- c. Referring to page 21 of HECO T-11, please provide a copy of all additional workpapers, calculations, quote sheets, correspondence or other documentation from KMH LLP that was relied upon or otherwise prepared by HECO in quantifying the \$750,000 forecast amount.

CA-IR-238

Ref: HECO T-11, pages 19 and 21, & T-11 Response to CA-IR-2, Attachment 27 (Internal Audit Consulting Fees).

The 2009 forecast includes \$750,000 for additional consulting fees to assist in conducting various audit activities previously performed by HECO's internal audit staff prior to 2004. The referenced testimony also states that, since that time, HECO's Internal Audit staff has spent significant resources on SOX compliance matters. Further, HECO T-11 indicates that use of KMH LLP will commence in the second half of 2008. Please provide the following:

- a. Please provide further detail regarding the indicated shift in use of Internal Audit staff personnel from conducting internal audits pre-2005 to SOX compliance work post-2004, including some indication of the change in the number and complexity of internal audits.

- b. Since the shift in Internal Audit staff activities post-2005 through the first half of 2008, please explain how HECO met its Internal Audit needs in the absence of the referenced arrangement with KMH LLP.
- c. With regard to outsourcing internal audit and internalizing SOX compliance work, please provide comparable actual labor and non-labor expenses incurred in 2004 through 2007, year-to-date 2008, and 2009 test year forecast, explaining individually significant changes in test year expense levels relative to these recent years.

CA-IR-239

Ref: HECO T-11, page 45 (Standard Labor Rates).

Please provide the spreadsheet file used to develop the rate case standard labor rates, including adjustments to reflect 2009 overtime hours.

CA-IR-240

Ref: HECO T-11, page 45 (Standard Labor Rates & T&D Hours).

As discussed during the on-site interview on September 12, 2008, the T&D non-labor forecast (CA-IR-2, HECO T-8) includes additional outside services costs generally identified as "over demand." HECO T-11 indicated that T&D labor hour information has been compiled to identify the impact of the shift from HECO

labor hours to outside contractor. Please provide the referenced compilation in both hard copy and spreadsheet file formats.

CA-IR-241

Ref: HECO T-11, pages 50 to 52 (ITS Positions).

With regard to the addition of three ITS positions, please provide the following:

- a. Please describe the current status of filling each of the ITS positions.
- b. If the response to part (a) above indicates that the ITS positions are currently open, please provide further information regarding current plans and the expected time table for filling each position.
- c. In preparing the 2009 rate case forecast, were any reductions in outside service costs expected to be realized with the filling of the three ITS positions? If not, please explain.

CA-IR-242

Ref: HECO T-11, page 65 (RO Pipeline).

Please provide the following:

- a. Please provide a detailed description of the expected income tax treatment of the portion of the RO Pipeline to be "dedicated to BWS ... and included in RO regulatory asset."

- b. How will the income tax treatment of the RO Pipeline dedicated to BWS differ from the portion of the RO Pipeline retained by HECO? Please explain.
- c. Referring to part (a) above, please explain how the income tax treatment of the RO Pipeline dedicated to BWS has been reflected in the 2009 rate case forecast, providing copies of any additional supporting documents and/or pinpoint references to documentation previously supplied by the Company.

CA-IR-243

Ref: HECO T-11, page 73 (Pension Contributions).

At line 18, HECO T-11 states that no pension contributions were made in 2007 and none are expected in 2008 or 2009. Please identify and describe any expected impacts of the Pension Protection Act on HECO's future pension contributions.

CA-IR-244

Ref: HECO-1107 (HEI Forecast).

As discussed during the on-site interview on September 12, 2008, please provide the following information, in both hard copy and spreadsheet file formats:

- a. Intercompany Bill Summary for 2007 using 2008 allocation percentages.
- b. Calculation detail supporting the HEI labor rate.

- c. Special overhead loading schedule showing components included in the calculation of the HEI labor rates.
- d. Special studies:
 - 1. Lease study.
 - 2. Depreciation study.

Witness T-16 Mr. Okada.

CA-IR-245

Ref: HECO-WP-1604, page 2: Response to CA-IR-130 (State ITC Additions in 2008 and 2009).

Please provide a detailed calculation of the projected 2008 and 2009 projections of State ITC Additions as well as the HECO-1604 Adjustment value of \$3,480,000.

CA-IR-246

Ref: HECO T-16, pages 28 to 30 (Simplified Service Cost Method).

Please provide the Company's best current estimate of the one-time interest amount and all other economic benefits anticipated to ultimately result from resolution of the SSCM income tax issue and explain the Company's proposed ratemaking treatment for each element of such benefit(s). If any risks or costs are assumed to have been incurred by HEI shareholders in connection with this tax issue, which argue for shareholder retention of such benefit(s), please itemize and explain all such risks and costs and provide all available documentation in support of this position.

CA-IR-247

Ref: HECO T-16, pages 28 to 30 (Simplified Service Cost Method).

Please provide a descriptive itemization of all of the filings, applications, appeals and other documents filed by or for HECO in connection with the SSCM dispute, indicating for each document the Company personnel and approximate number of labor hours involved, as well as the outside service charges incurred in connection with these efforts.

CA-IR-248

Ref: HECO-1604 (State Capital Goods Excise Tax).

Please provide a calculation supporting the (3,480) thousand amount in the "adjustment" columns G and I of this schedule.

CA-IR-249

Ref: HECO-WP-1602 (IRC Allowed Percentages).

Please provide supporting documentation for the 14% / 35% ratio "as allowed under IRC Section 247."

CA-IR-250

Ref: HECO Response to CA-IR-130, page 11 (State ITC Estimates).

Please provide the following information:

- a. Provide the calculations and references needed to tie the "Total Depr Plant Adds" amounts for each year into the Company's calculation of rate base.

- b. Explain why/whether the historical "5Yr Ave% O/S & Matl" percentage calculated on page 12 would be applicable to the 2009 costs of constructing the new CT-1 generating unit.
- c. Provide a restated calculation of 2009 estimated State ITC if this historical percentage is not applicable to the CT-1 costs.
- d. Provide copies of all documents associated with your response.

CA-IR-251

Ref: HECO-WP-1605 (Projected Account 282 Activity 2008 & 2009).

Please explain the process and provide the PowerTax calculations and other supporting documentation needed to reconcile the test year book basis capital additions projected for 2008 and 2009 into the related depreciable tax basis plant additions, tax depreciation and resulting projected Account 282 Federal and State ADIT estimates for each year.

CA-IR-252

Ref: HECO Response to CA-IR-132 (SSCM Deduction Regulations).

Please provide a copy of (or pinpoint citation into) the relevant "regulations issued by Treasury" that are referenced at the end of this response.

Witness T-17 Ms. Nagata.

CA-IR-253

Ref: HECO T-17, pages 8 to 10, & HECO-1703 (CIP1 Plant Additions).

Please provide the following regarding the 2008 and 2009 plant additions:

- a. Please confirm that the \$9,005,785 shown as 2008 CIP-related plant additions is included in the beginning rate base balance for 2009 rate case purposes. If this cannot be confirmed, please explain.
- b. Please provide a copy of, not access to, the Project Initiation Authorization packets (or similar documentation) for each of the ten (10) CIP1 plant addition projects plus the land parcel project identified on HECO-1703.
- c. For each of the identified 2008 CIP1 plant addition projects, please provide the actual date each project was completed and determined to be in-service.
- d. Referring to part (c) above, for each project not yet completed and determined to be in-service, please provide the Company's best estimate of when such project(s) are expected to be completed.

CA-IR-254

Ref: HECO T-17, pages 8 to 10, & HECO-1703 (CIP1 Plant Additions).

Please provide the following:

- a. For each of the identified 2008 CIP1 plant addition projects, please provide a detailed explanation of the basis for determining that the project was (or will be) placed in-service in 2008 when CIP1 will not be completed and in-service until 2009.
- b. Regarding the identified 2008 CIP1 plant addition projects, does each project represent a completely new facility (or asset) that did not previously exist or does it represent a replacement or upgrade of a previously existing facility (or asset)? Please explain.
- c. Referring to part (a) above, please provide the original cost of the retired, or to be retired, asset as a result of the completion and in-service of each 2008 CIP1 plant addition project.

CA-IR-255

Ref: HECO T-17, pages 8 to 10, & HECO-1703 (CIP1 Plant Additions).

Regarding CIP1 Project P4900000, please provide a breakdown of the \$142.4 million project cost estimate between the following:

- a. Structures and facilities dedicated to CIP1.
- b. Major common facility components (e.g., fire protection system, water facilities, office space, warehouse, repair facilities, pumps, etc.) sized to accommodate station expansion requirements beyond CIP1.

- c. AFUDC.
- d. Referring to the response to part (b) above, please explain and compare the facilities sized to accommodate station expansion requirements beyond CIP1 with those only required to meet the needs of CIP1.

CA-IR-256

Ref: HECO-1704 (2008 to 2009 Plant Additions).

Please provide a copy of, not access to, the Project Initiation Authorization packets (or similar documentation) for each of the following projects:

- a. Y00044, Ko Olina Substation.
- b. Y00064, CIP-Community Benefits Package.
- c. P0001534, Barbers Point Fuel Oil Tank # 131.

CA-IR-257

Ref: HECO T-17, page 12, & HECO-1705 (CIP1 Second Parcel).

The referenced testimony briefly describes a second land parcel of 1.76 acres at the CIP1 Generating Unit site for the future expansion of the AES Substation. Please identify and describe the circumstances under which HECO envisions an expansion of the AES Substation would be required or necessary.

CA-IR-258

Ref: HECO T-17, page 14, HECO-1706 & HECO-WP-1706 (CIAC).

The referenced testimony briefly discusses two methods used to estimate CIAC for specific projects (determined by engineers) and programs (based on trending). However, the spreadsheet files underlying HECO-1706 and HECO-WP-1706 contain input values. Please provide additional documentation (in both spreadsheet file and hardcopy formats) supporting the values under each of the following CIAC methods:

- a. Engineering project forecasts, by project.
- b. Program trending calculations.

CA-IR-259

Ref: HECO T-17, page 15 (CIAC).

At line 5, HECO T-17 states that half as many projects with CIAC were forecast in 2009 as compared with 2008. Please provide the following:

- a. Please provide the actual number of projects with CIAC in each year 2006, 2007 and 2008 to-date.
- b. Please provide the estimated number of projects with CIAC in 2008 and 2009.
- c. Please explain why half as many projects with CIAC were forecast for 2009 in relation to 2008.

CA-IR-260

Ref: HECO T-17, page 15, & HECO-WP-1707, page 2 (Customer Advances).

The referenced workpaper provides recorded receipts and refunds of customer advances by year for the period 2003 through 2007. Please provide the recorded year-end balance of customer deposits during calendar years 2002 through 2007.

CA-IR-261

Ref: HECO T-17, pages 18 and 19 (Forecast Adjustments).

The referenced testimony describes and provides examples of budget adjustments, issue simplification adjustments and normalization adjustments. Please provide the following:

- a. Has the Company compiled a listing of each of these types of adjustments, beyond the examples set forth in testimony?
- b. If the response to part (a) above is affirmative, please provide such lists.
- c. If the response to part (a) above is negative, please explain why the Company has not maintained any tracking or listing of these various adjustments that are integral to the rate case forecasting process.

CA-IR-262

Ref: HECO T-17, pages 20 and 21 (Earnings Protection).

The referenced testimony describes a target reduction of \$8 million in 2008 short run spending and refers to HECO T-7 and HECO T-8. Please provide the following:

- a. Please provide the allocation of this target reduction to process areas/departments, as referenced at page 20, line 22.
- b. Did each process area/department actually reflect the allocated target reduction in the 2008 budget that served as the basis for the 2009 rate case forecast? Please explain and identify any variances.
- c. In preparing the 2009 rate case forecast, please identify each process area/department that reversed or eliminated the target reduction embedded in the 2008 budget.
- d. Referring to part (c) above, please explain why each identified target reduction was eliminated for purposes of preparing the 2009 rate case forecast.

Witness T-22 Mr. P. Young.

CA-IR-263

Ref: HECO-2201 through HECO-2206, (Cost of Service Model Files).

Please provide electronic Excel files associated with the cost of service scenarios presented by Mr. Young that were not documented within HECO-WP-2203 and WP-2205.

CA-IR-264

Ref: HECO T-22, page 33, lines 13 to 21 (Schedule P Consolidation).

Please explain the methods used and provide copies of the customer impact studies that were prepared by HECO to determine that the Company's proposed Schedule P rate consolidation at proposed prices will not unreasonably impact any individual customers.

DOCKET NO. 2008-0083

HAWAIIAN ELECTRIC COMPANY, INC.

EIGHTH SUBMISSION OF INFORMATION REQUESTS

CA-IR-265

Ref: HECO Application to PUC – Advanced Metering Infrastructure Program (AMI Application).

Please provide a complete copy of the Company's AMI Application and related supporting Attachments and confidential documentation, as discussed with regard to the HECO T-8 Rate Case Update.

CA-IR-266

Ref: HECO Application to PUC – Dynamic Pricing Program (DPP Application).

Please provide a complete copy of the Company's DPP Application and related supporting Attachments and confidential documentation.

CA-IR-267

Please describe all decisions made and actions taken by HECO management to date in response to the current financial and economic crisis, including:

- a. Changes in financial management,
- b. Revised staffing or workforce management strategies,
- c. Supply contract renegotiation efforts,
- d. Other cost reduction/austerity measures that have been implemented,

- e. Changed commercial or credit/collection policies.
- f. Provide complete copies of documents associated with or supportive of your response to parts (a) through (e) of this information request.
- g. Provide calculations of each revision to the Company test year revenue requirement to account for each of the changes identified in your response to parts (a) through (e) of this information request.

CA-IR-268 Please provide complete copies of the Company's most recently prepared long run business plan and financial forecast, indicating the most current available view of operating revenues, expenses, capital investment, cash flow and return on investment for as many future years as are projected in the normal course of business.

CA-IR-269 **Ref: HECO Response to CA-IR-39, Attachment 1 (WP-101 Non-Labor Alternate Sort Spreadsheet).**

Please provide an update of this Attachment, substituting 2008 Recorded data in place of the Budget 2008 data previously provided.

CA-IR-270

Ref: HECO Response to CA-IR-40, Attachment 1 (WP-101 Labor Expense Alternate Sort Spreadsheet).

Please provide an update of this Attachment, substituting 2008 Recorded data in place of the Budget 2008 data previously provided.

CA-IR-271

Please provide a detailed trial balance report for all active income statement and balance sheet HECO sub-accounts at close of business as of December 31, 2008.

CA-IR-272

On December 3, 2008, the Honolulu Advertiser announced an agreement between HECO and Better Place to establish an electric vehicle charging network. Please provide a copy of this agreement and explain and quantify the anticipated revenues, expenses, investment and operational impacts in each of the years 2009, 2010 and 2011 that HECO expects to experience in connection with this agreement.

CA-IR-273

In Docket No. 2007-0416, HECO proposed certain types of projects, activities and programs to be considered part of the Renewable Energy Infrastructure Program ("REIP") and eligible for surcharge recovery through a REIP surcharge, after application, consideration and approval by the Commission. Please state, with specificity, each REIP project, activity and program HECO has

identified to date and provide the following information for each such item:

- a. A detailed description of the project, activity or program, indicating why the activity/investment is needed and how it is qualified for REIP consideration.
- b. The most detailed available estimate of quarterly anticipated expenditures by NARUC account.
- c. Reference to where HECO's evidence in support of REIP consideration and surcharge recovery has been (i.e., in rate case updates), or will be (identify each existing or anticipated Docket), submitted for consideration by the Commission.
- d. Estimated REIP surcharge amounts to be recovered from customers by quarter, for each applicable future period.

Witness T-1 Mr. Alm.

CA-IR-274

Ref: HECO T-1 Update, pages 3 and 15 to 23 (REIP/CEI Surcharge).

According to Mr. Alm at page 3, certain costs now included in the Company's test year updates are proposed to be recovered through the new REIP/CEI surcharge, instead of through base rates. At pages 15 to 23, Mr. Alm describes certain "Labor costs for HCEI" for which, "HECO would be willing to discuss surcharge recovery of these items should the Consumer Advocate take the position that such recovery is appropriate." Please state with

specificity exactly which types and categories of expenses and new investments in the rate case test year are proposed by HECO to be recoverable under the REIP/CEI surcharge mechanism, indicating each definition, accounting classification and other criteria that should be applied to isolate such costs for ratemaking and accounting purposes.

CA-IR-275

Ref: HECO T-1 Update, page 5 (Sales and Net Revenue Update).

Mr. Alm refers in his update to "a net increase of \$11,462,000" that would result from recognition of the reduced 2009 sales forecast that is sponsored by HECO T-2 (Mr. Willoughby). Please provide complete copies of the electronic files supporting the calculation of this amount (or reference to update supporting files already provided) and state/explain all revised methodologies or changed assumptions employed in such calculations (if any).

CA-IR-276

Ref: HECO T-1 Update, Attachment 1, page 3 (RBA Interest).

According to Mr. Alm at page 3 of Attachment 1, "The proposed RBA will also reflect the accrual of interest at the rate of the then-approved rate of return applied to the simple average of the beginning and ending balance in the balancing account each month." Please respond to the following:

- a. Explain the basis for this proposed interest provision, indicating where in the HCEI Agreement authority for such an interest provision is believed to exist.
- b. Explain why the balance upon which interest would be calculated has not been reduced for the deferred taxes that would arise from the recording of RBA revenues that are not currently taxable.
- c. Describe how the proposed RBA interest rate compares to the interest that HECO is allowed to accrue on IRP/DSM costs while awaiting recovery from ratepayers.

CA-IR-277

Ref: HECO T-1 Update, Attachment 1, page 3 (RBA Procedures).

In part 5 of his Update Attachment 1, Mr. Alm describes a "process" through which HECO proposes to "notify the Commission" "On November 30" of certain RBA and RAM revenue changes to be incorporated into new rates that, "... would be effective on January 1, 2010." Please provide the following information:

- a. Identify and explain how the proposed timing of this filing/notification would provide adequate review time to the Commission, the Consumer Advocate and any concerned parties for review of the proposed rate changes prior to the effective date of new rates.

- b. Provide specimen copies of all schedules, calculations, workpapers, supporting documentation and other information that HECO proposes to include in support of its annual RBA filing/notification.
- c. Explain the procedures HECO would propose in the event the Commission or any party objects to the Company's calculations or proposed rates, including any provisions for discovery and hearings.

CA-IR-278

Ref: HECO T-1 Update, pages 15 to 21 (HCEI Staffing Changes).

In part D of his Rate Case Update, Mr. Alm describes a number of newly created positions that are proposed in the 2009 test year to be "either dedicated or substantially involved in HCEI activity." Please provide the following information regarding these new positions:

- a. An update of HECO-1503 replacing columns E through G with 2008 actual data and adding columns for the projected newly created positions and resulting revised proposed "2009 Test Year Average" positions in each department.
- b. In the event HECO is unable to recruit and hire new employees for each of the proposed new positions, describe how the Company plans to timely satisfy its HCEI commitments in each area where new staffing is proposed.

- c. Provide copies of all studies, analyses, workpapers, projections and other documents supporting HECO's decision to create each of the proposed new positions.
- d. Confirm that all required management approvals have been secured for each of the newly created positions, such that posting and recruiting of each position has been initiated – or explain each instance where approvals are pending and posting/recruiting has not commenced.
- e. Provide a monthly schedule of the assumed hiring dates for each of the newly created positions within HECO's test year updates, annotated to indicate which positions have been filled without creating backfill vacancies, which have been filled with a backfill vacancy, which have an offer pending and each position where a candidate has been identified for which an offer is anticipated to be made.

CA-IR-279

Ref: HECO T-1 Update, Attachment 2 (Summary of O&M Changes).

Please provide an Excel format copy of this summary of O&M adjustments and explain how the various presented scenarios of adjusted O&M expense correlate to the numerous revenue requirement calculations presented as Attachments to HECO's T-23 update.

CA-IR-280

Ref: HECO T-1 Update, Attachment 4 (Revised Rate Schedules).

Please provide an electronic redline/strikeout file indicating the changes made to proposed tariffs in Attachment 4, relative to the Company's proposed tariffs in its initial filing.

Witness T-2 Mr. Willoughby.

CA-IR-281

Ref: HECO T-2 Update, page 14 (August 2008 Electricity Price).

According to the Forecast Assumptions, an August 2008 electricity price was used, and then escalated for "Growth rates for 2009 – on applied to 2008." Please provide the following information:

- a. The source documents and calculations supporting the 32.24 and 28.14 nominal price input values for Residential and Commercial, respectively.
- b. Explain what these values would be if electricity prices at September, October, November or December had been used in place of the August values.
- c. Provide source documents and calculations supporting your response to part (b) of this information request.
- d. Describe and explain whether HECO believes that August 2008 electricity prices are any more indicative of ongoing conditions than prices in subsequent months.

- e. Provide an estimate of the revised Residential use per customer that would be predicted for 2009 if the most recent available month's electricity price in 2008 had been used in place of the August values (how would the 2,028.6 GWH and 7,746 Use Per values on Update page 15 be impacted).
- f. Provide an estimate of the revised Commercial use per customer that would be predicted for 2009 if the most recent available month's electricity price in 2008 had been used in place of the August values (how would the 5,418.6 GWH value on Update page 16 be impacted).

CA-IR-282

Ref: HECO T-2 Update, pages 9 & 10 (Actual GWH Sales).

Please provide updated comparisons of recorded calendar 2008 sales by rate class to actual 2007 and to the Mar 08 Update, respectively.

CA-IR-283

Ref: HECO T-2 Update, page 6 (Revised Forecast GWH Sales).

Please confirm that HECO's internally developed and management-approved 2009 sales forecast for the Company's official operating budget for 2009 is the same as presented in the Company's rate case update at page 6, or provide the official budget sales data by rate schedule and explain each reason why the amounts are different.

Witness T-3 Mr. Young.

CA-IR-284

Ref: HECO T-3 Update, page 1 (Interim Rates Correction).

In the company's September 30, 2008 notification letter to the PUC, errors were noted in connection with other operating revenues approved in D&O 24171. Please provide supporting documentation and calculations associated with each correction and the resulting \$401,000 overall change in the interim increase.

CA-IR-285

Ref: HECO T-3 Update, page 1 (Schedule PP Direct Customer).

Please explain how HECO became aware of the changed customer classification and provide supporting documentation for the DS billing demand volumes added to the DS classification for Schedule PP as a result of this revision.

Witness T-7 Mr. Giovanni.

CA-IR-286

Ref: HECO-740, Response to CA-IR-214 (316B Expenses).

Please provide the following additional information regarding projected and adjusted test year Clean Water Act 316(B) expenses confirm that this Excel file is the most current available long term generation maintenance plan and provide the following information:

- a. Copies of all Tenera Environmental invoices received by HECO since April 1, 2008.

- b. Explain why the Attachment 2 Tenera Proposal at page 5 contemplates "A proposed Schedule for completing the Scope of Work" indicates, "...completion of the study in April 2009" and the timeline shows a Final Report completed in July 2009 while the Company's test year projections (in Attachment 10) indicate Tenera work and costs anticipated to continue well past these April and July dates.
- c. Provide an updated Attachment 9 for all available months of actual 316(B) non-labor expenses, with further explanations and redistributions of the "Manual Journal Transaction" entries, showing those amounts in the appropriate month for each affected vendor.
- d. At page 2 of the narrative response to CA-IR-214 is the statement, "The remainder of sampling/monitoring-related activities for May-December 2009 was extrapolated by the HECO environmental staff based on the cost estimates in the Tenera Environmental proposal. The cost estimated for 2009 assumes that the monitoring schedule (i.e., monthly impingement and entrainment monitoring from October to January, and month impingement and biweekly entrainment sampling from February to September to account for any seasonal impacts) will remain the same and carry over for the next few years." Please provide all available support and

documentation for this extrapolation and assumption, indicating each reason why this work is assumed to be ongoing after Tenera has completed its "...a final report [to] be submitted following the third year of data collection" (see Attachment 2, page 1).

- e. Explain each instance when a PEWON work order has been used for 316(B) related costs (see Attachment 9 footnotes) and describe when PEWON accumulations of costs would be appropriate in connection with 316(B) work.
- f. Explain each reason why the projected monthly charges for each vendor in 2009 (per Attachment 10) are much higher than actual cost levels actually incurred by vendor in 2008 (Attachment 9, as updated in part (c) of this information request).

CA-IR-287

Ref: HECO T-7 Update, Attachment 2, pages 2 & 3 (HCEI Studies).

For each of the line items describing "Outside Services Scope" on pages 2 and 3 of Attachment 2, please provide the following information:

- a. Describe the efforts to date of HECO to define work requirements and secure internal and contractor expertise to fulfill the Company's HCEI obligations.

- b. Provide copies of all requests for proposals or other solicitation documents prepared by or for HECO to describe the planned work and request information from potential vendors.
- c. Provide copies of all proposals and other documents from potential vendors that is responsive to the information in your response to part (a) of this information request.
- d. Provide copies of all contracts for services from vendors.
- e. Provide a monthly breakdown of actual incurred costs by vendor that is comparable to Attachment 2, pages 2 and 3.
- f. Provide a monthly breakdown of projected 2009 costs by vendor that is comparable to Attachment 2, pages 2 and 3.

CA-IR-288

Ref: HECO T-7 Update, page 21; Attachment 5 (Greenhouse Gases Expense).

- a. Provide an itemization of actual HECO expenses incurred to date, by payee, for compliance with Hawaii's Global Warming Solutions Act and explain the Company's specific strategy for compliance with same.
- b. Provide supporting documentation for the proposed level of test year expense for the cost of membership to a tracking organization, including any proposals or contracts associated with HECO commitments to same.

CA-IR-289

Ref: HECO T-7 Update, Attachment 6, page 2 (PIU Outside Service Increase).

Please provide a detailed itemization of the revised \$125,490 and \$292,810 of Outside Service test year projected costs for RA= PIC and RA=PIU, respectively, with complete copies of all proposals, contracts, workpapers and other documents associated with the requested itemization and your response.

CA-IR-290

Ref: HECO T-7 Update, pages 22 to 35 & 44 (Power Supply Staffing).

Please provide detailed position listing of all Power Supply Process Area positions in each RA, as modified by the T-7 Update, indicating actual staffing levels in each existing and newly approved position at December 31, 2008 and the planned hiring date to fill each vacancy as of December 31, 2008.

CA-IR-291

Ref: HECO T-7 Update, Attachment 6, page 1 (Outside Consulting RA=PXP).

Please provide a detailed itemization of Outside Service test year projected costs of \$100,000 for RA= PXP, with complete copies of all proposals, contracts, workpapers and other documents associated with the requested itemization and your response.

CA-IR-292

Ref: HECO T-7 Update, page 37; Attachment 11 (PV Engineer).

Please provide a detailed written position description for the Photovoltaic Engineer position and explain the Company's planned posting and recruitment activities for this position, indicating why a July 2009 hiring date is being targeted.

CA-IR-293

Ref: HECO T-7 Update, pages 38 to 42 (P-month Replacement).

Please provide the following information:

- a. Explain whether HECO has decided upon a P-month replacement simulation model and explain how the replacement was determined to be optimal.
- b. Provide the commercial terms of the replacement simulation software.
- c. Explain why training costs should be borne solely by HECO, when the new simulation software would be used to also benefit MECO and HELCO.

CA-IR-294

Ref: HECO T-7 Update pages 42 & 43; Response to CA-IR-188, Attachment 1 (Station Maintenance).

Please provide the following information regarding station maintenance:

- a. A listing of station maintenance projects, in the format of CA-IR-2, Attachments 11E, 11G and 11L, showing in each of

the years 2005, 2006, 2007, 2008 to date, the actual station maintenance expenses incurred by project.

- b. An updated listing of station maintenance projects, in the format of CA-IR-2, Attachments 11E, 11G and 11L, showing changes made in planned activities and identifying each of the projects included and excluded in determining updated test year proposed levels of expense.
- c. Identify, for each of the listed station maintenance projects in your response to part (b) of this information request, when the project was initially identified as needed and identify the reasons why work has been delayed in any of the projects that were determined to be needed prior to 2008.
- d. Provide an Excel electronic file for CA-IR-188, updated to include the full calendar year 2008 in place of the column "Rec YTD 08/2008."
- e. Explain whether or not "Asset Optimization" as included in CA-IR-188, Attachment 1 for only recent years was not performed prior to 2008, and
- f. Provide a revised Attachment 1 showing such "Asset Optimization" spending in prior years if applicable, to ensure comparability of the amounts shown across all years.

CA-IR-295

Ref: HECO T-7 Update; page 44 (Biofuels Outside Engineering).

Please provide the most detailed available description of this planned work and consulting work scoping, as well as all RFP's, contracts and other documents associated with your response.

CA-IR-296

Ref: HECOT-7 Update; page 45 (HCEI Solar Outside Services).

Please provide the following information:

- a. The most detailed available description of this planned work in each category listing on page 45.
- b. Copies of all RFP's, contracts and other documents associated with your response to part (a) of this information request.
- c. Explain whether each category of these costs will be ongoing in years subsequent to 2009 and in what amounts.
- d. Describe whether/why CEIS surcharge recovery is believed to be appropriate for PV Host Solar program costs.

CA-IR-297

Ref: HECO T-7 Update, Attachment 14, pages 6 to 8; Response to CA-IR-207 Attachment 1 (CIP CT-1 O&M Expense Projections).

Please provide detailed source documents, calculations, proposals, contracts and all other available information supporting each of the following elements of CT-1 projected Non-labor O&M expenses:

- a. Waste Water treatment chemicals \$84,000;

- b. Demin/Evap Chemicals \$24,000;
- c. Boiler Water Treatment \$84,000;
- d. RO Water \$180,000;
- e. Hazardous Waste Disp \$ 28,000;
- f. Landscaping \$ 25,000;
- g. Prev. Mtce. Various / \$500 - \$1000 per month;
- h. Facility Repairs \$160,000; and
- i. Blackstart Maint. \$ 20,000.

CA-IR-298

Ref: HECO T-7 Update, Attachment 15 (Emission Fee Forecast).

Please provide the following additional information:

- a. Explain whether/why the test year projected emission fee reduction (due to lower anticipated sales) should be reflected in the revenue requirement, irrespective of whether or not the decoupling mechanism and deferral accounting justify not updating sales and revenue forecasts.
- b. Confirm that revenue decoupling will not track any future over or under-recoveries of emission fees arising from changing sales levels.
- c. Provide all analyses, studies, projections, workpapers, correspondence and other documents relied upon by HECO to add a 5% contingency to estimated test year emission fees.

Ref: HECO Response to CA-IR-194; T-7 Update, page 44 (Existing Generation Standby/Layup).

At page 44 of his Update, Mr. Giovanni references "other projects [that] include projects to enable the cold layup (i.e., long term de-activation) of generating units..." Please provide the following information:

- a. Identify the existing HECO units that are most likely to be candidates for potential consideration for cold layup.
- b. Explain how commercial operation of CIP Unit CT-1 and/or the additional of large amount of renewable contract capacity is expected to impact the utilization of existing HECO non-reheat steam generating units and the potential for cold layup of one or more existing units.
- c. Describe whether biofuel conversion is not being considered for certain existing HECO units because of the expectation that the age, condition, operational considerations or future anticipated need for the unit causes such conversion to be uneconomical.
- d. For which of its existing generating units is HECO presently able to defer large new capital additions, comprehensive overhauls or expensive preventative maintenance projects in anticipation of potential cold layup in the future?
- e. Provide complete copies of all studies, reports, analyses, workpapers, maintenance schedules and other documents

associated with your responses to parts (a) through (d) of this information request.

CA-IR-300 **Ref: HECO 715, (Work Order Backlog Reports).**

Please provide, for each available month subsequent to May 2008, a complete copy of the Backlog Report.

CA-IR-301 **Ref: HECO 718, (2009 Overhaul Schedule).**

Please provide a complete copy of the currently effective management-approved 2009 planned maintenance schedule.

CA-IR-302 **Ref: HECO 724, (Operating Division Labor Hours).**

Please provide an updated HECO-724 replacing the column (D) 2008 Budget data with calendar 2008 actual data.

CA-IR-303 **Ref: HECO 729, (Maintenance Division Labor Hours).**

Please provide an updated HECO-729 replacing the column (D) 2008 Budget data with calendar 2008 actual data.

CA-IR-304 **Ref: HECO 728, (Maintenance Division Labor and Supplemental Labor Costs).**

Please provide an updated HECO-728 replacing the column (H) 2008 Budget data with calendar 2008 actual data.

CA-IR-305

Ref: HECO 738, (Training Costs).

Please provide an updated HECO-738 replacing the column containing 2008 Budget data with calendar 2008 actual data.

CA-IR-306

Ref: HECO 739, (Operations Non-Labor Expense Comparisons).

Please provide an updated HECO-739, inserting an additional column containing calendar 2008 actual data and calculated changes in the 2009 estimates relative to 2008 actual amounts.

CA-IR-307

Ref: HECO 742, (Maintenance Expense Comparisons).

Please provide an updated HECO-742 replacing the column (F) 2008 Budget data with calendar 2008 actual data.

CA-IR-308

Ref: HECO 743, (Maintenance Non-Labor Expense Comparisons).

Please provide an updated HECO-743, inserting an additional column containing calendar 2008 actual data and calculated changes in the 2009 estimates relative to such 2008 actual amounts.

CA-IR-309

Ref: HECO 744, (Maintenance Non-labor Expense Comparisons).

Please provide an updated HECO-744 replacing the column (F) 2008 Budget data with calendar 2008 actual data.

CA-IR-310

Ref: HECO 745, (Raw Material Price Indices).

Please provide an updated HECO-745 adding data through December 2008.

CA-IR-311

Ref: HECO 746, (Power Supply Goods Price Indices).

Please provide an updated HECO-746 adding 2008 average cost and % change data.

CA-IR-312

Ref: HECO 748 through HECO-752, (Production O&M Expense Comparisons).

Please provide updated Exhibits HECO-748, HECO-749, HECO-750, HECO-751 and HECO-752 replacing the 2008 Budget data with calendar 2008 actual data and revising the graphs accordingly.

Witness T-8 Mr. R. Young.

CA-IR-313

Ref: HECO-WP-812 & response to CA-IR-107 (T&D M&S).

Please update the response to part (a) of CA-IR-107 to include monthly reports of stores receipts, issues and adjustments for the months of August through December 2008.

Ref: HECO T-8 Update, Attachment 1, & responses to CA-IR-1 and CA-IR-220 (T&D Overdemand Labor Hours).

Attachments 1 and 2 of the response to CA-IR-220 represent the T&D resource leveling reports before and after the transfer of labor "overdemand" to outside services. Attachment 1 of the HECO T-8 Update summarizes, by labor class, the supply and demand hours with the difference representing "overdemand." Referring to Update Attachment 1, the total T&D "supply" hours are 315,288 and "demand" hours are 382,988, resulting in 67,700 "overdemand" hours that are distributed between overtime (47,293) and contractors (20,410). The response to CA-IR-1 contains various documentation sources underlying the 2009 T&D labor forecast, including labor input sheets. Please provide the following:

- a. Please confirm that the "supply" hours can be derived by multiplying the number of forecast employees by labor class times 2,088 hours in a year. If this cannot be confirmed, please explain.
- b. Please confirm that the "overdemand" hours represent the difference between the "supply" hours and the "demand" hours. If this cannot be confirmed, please explain.
- c. Please confirm that Attachment 1 of the HECO T-8 Rate Case Update summarizes the T&D "supply," "demand" and "overdemand" hours by labor class. If this cannot be confirmed, please explain.

d. Referring to Update Attachment 1 and the response to CA-IR-1, it remains unclear how the Company quantified and determined the level of "demand" hours for each labor class – from which "overdemand" results. For each of the following labor classes, please provide the assumptions underlying the 2009 forecast work requirements and show how such work requirements were translated into labor "demand" for 2009:

1. Sys Op – R_INSCRW : 16,172 demand hours.
2. Sys Op – R_SUBCRW: 78,799 demand hours.
3. C&M – OHCREW: 292,833 demand hours.

[Note: Please provide a further breakdown of the above demand hours, as necessary, to show the translation or correlation of work requirements into demand hours or to cross-tie elements of the above demand hours to discrete work requirements data previously supplied in response to CA-IR-1.]

Witness T-9 Mr. Yamamoto.

CA-IR-315

Ref: HECO T-9 Update, page 2 (Increase in Bill Inquiries).

Please provide the following information regarding the increase in bill inquiries ("BI") referenced by Mr. Yamamoto:

- a. Annual comparative statistics regarding the number of BI by category, for the periods 2006, 2007 and 2008, with monthly data for 2008.
- b. Explain whether HECO anticipates BI activity to decline with lower ECAC billed charges and provide copies of the information relied upon in support of this explanation.

CA-IR-316

Ref: HECO T-9 Update, page 3 (Credit Check Costs).

Please provide:

- a. Transaction volume statistics for credit checks in each of the years 2006, 2007 and 2008, with monthly data for 2008.
- b. Supporting documentation for the 54,000 transaction volume projected for 2009.
- c. Documentation supporting the \$1.43 plus \$0.11 FACTA surcharge proposed for 2009.

CA-IR-317

Ref: HECO T-9 Update, Attachment 2, page 3 (CIS Programming Increase).

Please provide:

- a. Supporting studies, analyses, workpapers, projections and other information relied upon by HECO to determine that an additional \$104,000 (over the initially estimated \$198,000) will be needed for senior business analysts to support post go live CIS programming.

- b. Explain the tasks to be undertaken by such consultants after completion of the CIS system, and
- c. Provide documentation supportive of the revised cost amounts being proposed.

CA-IR-318

Ref: HECO T-9 Update, pages 1 & 2 (Six Temporary Meter Readers).

Please provide the following information regarding the proposed \$353,000 for temporary meter readers from a staffing agency:

- a. A copy of staffing agency contracts and related correspondence regarding the added contract personnel.
- b. Provide monthly hours and rates associated with each of the six positions being proposed.
- c. Describe and quantify the "increase in testing and project support requirements recently identified by the Customer Information System ("CIS") team.
- d. If more CIS testing and project support is now required, causing a shift of HECO meter readers toward CIS project completion, why is there not an offsetting transfer of HECO labor costs to the CIS deferral account to mitigate the expense of contract meter readers performing the normal duties of Company employees?
- e. Provide the most detailed available current plan and schedule for CIS project staffing and completion, indicating

the monthly charges in 2009 now anticipated for Company labor and non-labor costs charged between the CIS deferral account and operating expense accounts (by RA and activity).

- f. Provide revised pages for the HECO response to CA-IR-1 and CA-IR-2 as necessary to reflect current CIS project staffing and completion plans.

CA-IR-319

Ref: HECO T-9 Supplemental Update Filing (Uncollectibles).

Please provide a detailed itemized description of each individual account write-off within the "NET WRITE-OFFS" column of Updated HECO-WP-905, page 2, in calendar 2006, 2007 or 2008 that related to a bankruptcy filing or individual account non-payment exceeding \$50,000.

CA-IR-320

Ref: HECO Response to CA-IR-148 (Customer Service Metrics).

Please confirm that the data provided represents the only service metrics tracked by Mr. Yamamoto and the Customer Service Department and provide trend tracking summaries of changes in this information for all available periods of 2008. If any additional statistical performance data is routinely tracked in the normal course of business by Mr. Yamamoto or the Customer Service

Department, please provide trend tracking summaries of such data as well for all available periods of 2008.

CA-IR-321

Ref: CIS Project Problems.

Please provide the following information regarding the selection of the Peace/First Data CIS system that was made by HECO:

- a. Which large electric utilities are believed by HECO to be using the current version of Peace CIS software that was selected by HECO, versus earlier versions of the Peace CIS software?
- b. List and describe the CIS software vendors from which HECO solicited and received proposals.
- c. What vendor/consultant finalists other than Peace made presentations to HECO.
- d. Explain the process employed by HECO to evaluate the Peace CIS version it selected and is developing and provide complete copies of all due diligence work product relied upon by HECO in accepting the risks of deployment of the newest Peace software version.
- e. Provide copies of all studies, analyses, workpapers, reports and other documents prepared by or for HECO that were relied upon by HECO to rank and evaluate CIS software development proposals that were received by HECO.

- f. Describe the reasons why HECO selected the newest Peace software version over alternative vendors/products that were available.
- g. State whether the Peace software version selected by HECO is fully capable of meeting all identified future HECO business needs, including Advanced Metering Infrastructure and other new initiatives.
- h. Identify each known HECO billing system business requirement that cannot reasonably be met with the Peace/First Data CIS system that is under development and explain the Company's plans for upgrading to another version of Peace/First Data software or some other vendor(s) product.

CA-IR-322

Ref: HECO Responses to CA-IR-109, 111 and 146 (CIS Project Invoices and Contracts).

Please provide the following information:

- a. Update the dated summary of all amounts billed to HECO to date by Peace/First Data for the Peace CIS software and related services, indicating which of such amounts have been paid by HECO and which amounts have been withheld, as originally requested in CA-IR-111 part (d).
- b. Complete copies of the Peace CIS-related invoices rendered since the inception of the project.

- c. Provide copies of all correspondence (to the extent not already provided in response to CA-IR-146, Attachments 5 through 26) associated with Peace billings between HECO and Peace during 2007 and 2008, including but not limited to notifications of amounts withheld, amounts disputed or amounts associated with any claims asserted by HECO.
- d. Describe the current status of CIS project commercial arrangements with Peace, including a discussion of negotiated payment terms, change orders, progress payments as well as all planned activities to resolve any pending disputes between HECO and Peace.
- e. State HECO's position regarding the current CIS Project completion status, as measured by the Milestones set forth in Confidential Attachment 1 to CA-IR-109 at pages 146 and 147.

CA-IR-323

Ref: HECO T-9, pages 18 to 25 (Status of CIS, Bill Print, IVR,IWR).

Please provide the following information regarding the CIS Project:

- a. A detailed updated discussion of the "current status of the CIS project at HECO", including a description of all continuing problems and issues that may impact completion of the project on schedule and within budget.

- b. Provide the Company's current best estimate of the CIS go-live date and a description of the contingencies that may impact realization of that date.
- c. Provide updated HECO-907, HECO-908, HECO-WP-908 and other revised schedules, as applicable, associated with your response to part (b) of this information request.
- d. Explain whether and how the timing and amounts of projected test year expenses for Bill Print, IVR and IWR will be impacted by any revisions to the scheduled go-live planning for the CIS project.
- e. Provide complete copies of all reports prepared by Peace for HECO executives that identify CIS project critical path items and that were submitted since June 30, 2008 (as discussed in interviews on December 19, 2008).
- f. Provide complete copies of the CIS project monthly status reports that are provided to Darren Yamamoto for each month of 2008 (as discussed in interviews on December 19, 2008).
- g. Provide a complete copy of the most recent available contractor monthly detailed CIS project work plan (as discussed in interviews on December 19, 2008).
- h. Provide complete copies of all studies, reports, analyses, workpapers, projections, management presentations and

other documents supportive of your response to parts (a) through (d) of this information request.

CA-IR-324

Ref: CIS Project Problems.

Has HECO decided to reduce any of the initially planned scope of the CIS project, to reduce the number of workflows or to shift any work to the post go-live period? If affirmative, please identify and describe each such change and the reduced capabilities caused by same and explain the anticipated impact upon CIS project go-live schedule and ultimate total cost after any shifted work is later completed.

CA-IR-325

Ref: HECO Response to CA-IR-109, Confidential Attachment 3; (CIS Change Requests).

Please provide the following information:

- a. A summary listing of each change request that HECO has initiated since the original contract with Peace/First Data was signed, indicating the date of each change, the reasons for the change and the anticipated impact upon final project schedule and cost caused by the change.
- b. A summary listing of each change request that Peace/First Data has initiated since the original contract with Peace/First Data was signed, indicating the date of each change, the

reasons for the change and the anticipated impact upon final project schedule and cost caused by the change.

- c. Information describing how HECO and Peace/First Data have resolved issues regarding compensation for the change requests listed in your responses to parts (a) and (b) of this information request.

CA-IR-326

Ref: HECO Response to CA-IR-146, Confidential Attachment 1, page 500 (CIS Project Work Plan).

Please provide a complete copy of CIS Project Work Plan that corresponds to the June 2009 go live date and explain whether and to what extent current CIS project status is meeting the requirements of this Work Plan, explaining each area where current project progress is deficient relative to the Work Plan.

CA-IR-327

Ref: CIS Project Problems.

Did HECO issue any requests for proposals ("RFPs") to solicit additional contractor assistance for the CIS project, beyond the resources initially contracted at the time HECO retained Peace/First Data for the project? If affirmative, please provide the following information:

- a. Complete copies of all such RFPs,
- b. Describe all contractors retained in each area addressed by such RFPs.

- c. Provide an itemization of charges by month from each such contractor, to-date.

CA-IR-328

Ref: HECO Response to CA-IR-109, Confidential Attachments 27 and 28 (CIS Project Coordinating Committee).

Please provide complete copies of all presentations, reports, minutes, notes and other documents in the possession of HECO or its contractors that are associated with or prepared in connection with the referenced Coordinating Committee meeting.

CA-IR-329

Ref: HECO Response to CA-IR-109, Confidential Attachment 29 (CIS Project Work Scope Change/Deferral).

Please provide the following information:

- a. A complete copy of the "document" from First Data that is referenced in this letter.
- b. Explain with specificity how work scope or schedule changes discussed in your response to part (a) would likely impact the go-live functionality and go-live timing for the CIS project.
- c. Provide complete copies of all presentations, reports, minutes, notes and other documents in the possession of HECO or its contractors that are associated with or prepared in connection with the proposed "meeting" that is referenced in this letter.

CA-IR-330

Ref: HECO Responses to CA-IR-114, 115 and 223 (Outsourced Bill Print, IWR, IVR Expenses).

Please confirm that the planned outsourcing of Bill Print, IWR and IVR activities with First Data assumes integration with the completed CIS System and explain/quantify how changing anticipated CIS go-live dates are expected to impact the timing and amounts of test year projected bill print, IWR and IVR expenses. Provide detailed assumptions, workpapers and supporting documentation for your response.

CA-IR-331

Please provide, for HECO, MECO and HELCO, a summary of the recorded CIS project monthly deferred costs by RA and expense element, including any deferred carrying charges, from project inception through December 31, 2008.

Witness T-10 Mr. Hee.

CA-IR-332

Ref: HECO T-10 Update, page 4 (Director – Special Projects).

According to Mr. Hee, "The company has already filled the Director, Special Projects, position as of November 24, 2008. Please explain whether this position was filled externally or internally, indicating the present status of any backfill vacancy that was created and provide a written position description for the Direct, Special Projects position.

Please provide the following information regarding the Company's proposed test year IRP costs:

- a. Describe with specificity all IRP activities that are presently planned for 2009, indicating which tasks will be performed by Company personnel and which tasks will be performed by named contractors.
- b. Provide a listing of the deliverable written work products and schedule meetings/events by date that are associated with each element of your response to part (a) of this information request.
- c. Explain in detail how the Clean Energy Scenario Planning ("CESP") process described at Sections 32 and 33 of the CEI Agreement is expected to impact the IRP scope and timing of efforts originally anticipated and included in the Company's test year 2009 forecast.
- d. Provide an updated HECO-1028 to restate the proposed Base IRP Planning costs, to the extent necessary, in order to reflect known changes to planned IRP/CESP activity.
- e. Explain in detail whether and to what extent HECO will propose Clean Energy Initiative surcharge recovery for any or all CESP related activities and costs.

- f. Provide updated CA-IR-234 expense data, replacing the "Sum of 2008 Bud" data on pages 3 and 4 with 2008 actual expenditures and inserting a 2008 actual column in pages 5 through 9.

CA-IR-334

Ref: HECO Response to CA-IR-233, page 2 (Conservation Advertising Costs).

At page 2 of its response, the Company states, "HECO has proposed in its 2008 Annual DSM Modification and Evaluation ("M&E") Report that the RCEA Program be continued for 2009. The proposal to continue the RCEA Program is pending before the Commission, with a decision from the Commission expected prior to year end 2008." Please provide the following information:

- a. Describe the current status of the expected "decision from the Commission" and provide copies of all documents associated with your response.
- b. If HECO's request to "continue the RCEA Program" is granted, by what amount should test year proposed expenditures be revised to complement but not duplicate the RCEA spending?
- c. Explain how the HCEI-related consumer advertising referenced at page 4 of CA-IR-233 is different from proposed RCEA funding or the projected test year spending

amounts - how is advertising for three different initiatives to be coordinated and not duplicated?

- d. What amounts have actually been spent by HECO for energy efficiency advertising in each of the years 2005, 2006, 2007 and 2008 for RCEA, general energy efficiency messages, HCEI and in total by HECO?
- e. Describe all efforts undertaken by HECO to determine the optimal overall level of energy efficiency advertising that should be funded.
- f. Provide complete copies of all studies, reports, analyses, workpapers, projections and other documents prepared by or for HECO to determine the optimal level of annual energy efficiency advertising spending.

CA-IR-335

Ref: HECO Response to CA-IR-125 (Energy Efficiency Advertising Program).

According to the response, "Hawaiian Electric is a well recognized brand name and respected as a valuable and trustworthy source of energy information. Messages that come from commercial suppliers and/or unknown third parties, no matter how well intended or correct, may receive less recognition and less resulting action." Please provide copies of all reports, studies, analyses, surveys and other information relied upon by HECO to draw these conclusions.

CA-IR-336

Ref: HECO T-10, pages 24 & 25, Response to CA-IR-179 (DSM Incentives).

Please provide the following additional information:

- a. Confirm that HECO sales projections in the test year reflect all historical lost margins and anticipated test year lost margins from ongoing DSM installations.
- b. If your response to part (a) is anything but an unqualified confirmation, please explain any DSM lost margins that have not been fully recognized.
- c. Provide an update of CA-IR-179, page 2 amounts to include actual 2008 amounts by NARUC Account.
- d. Explain whether HECO will have any ongoing opportunity to earn Utility Incentives from load management or any other DSM-like activities.

CA-IR-337

Ref: HECO Response to CA-IR-120 (DPP Pilot Expenses).

Please update your response to CA-IR-120, indicating the present status of the Company's DPP program application and budgeted monthly spending, indicating whether/how the test year projected expenses should be modified given such status.

CA-IR-338

Ref: Response to CA-IR-228, Attachment 1 (Labor Hours by DSM Program).

Please provide updated information to replace "2008 Actuals thru June" with calendar year 2008 actual data.

CA-IR-339

Ref: Response to CA-IR-126 page 2 (Actual Staff – Base Employees).

Please provide an update to this table, showing monthly actual staffing through December 2008 as well as revised test year staff levels after accounting for the T-10 update addition of personnel.

CA-IR-340

Ref: HECO-1003 and HECO-1004 (Customer Service Expenses).

Please provide an update to HECO-1003 and HECO-1004 replacing the "Budget 2008" data with calendar year 2008 actual data and explain any significant costs shifts or fluctuations evident in the 2008 actual data, relative to prior years or the projected test year.

CA-IR-341

Ref: HECO T-10 Update, page 10, & HECO T-11 Update, page 6 (Decoupling Consultants).

HECO T-10 discusses the Company's anticipated need for consulting services for the development and testing of various decoupling/attrition mechanism and for other pricing alternatives. HECO's internal estimate of \$200,000 was allocated 80% to HECO,

with 10% each to HELCO and MECO. Please provide the following:

- a. Would retention of the identified consulting service have been required in the absence of the HCEI Agreement? If so, please explain.
- b. Please provide a copy of all documentation supporting the \$200,000 estimate.
- c. Please explain the basis for the proposed two-year amortization period.
- d. Please explain why the Company believes that the amortization of these costs should be included in base rates.
- e. Please provide the basis and underlying support for the 80/10/10 allocation between HECO, HELCO and MECO.

Witness T-11 Ms. Nanbu.

CA-IR-342

Ref: HECO T-11 Update, page 5 & Attachment 2 (International Financial Reporting).

At update page 5, HECO T-11 refers to actions by the SEC to move U.S. corporations toward International Financial Reporting Standards ("IFRS") by 2014. HECO's update includes an additional \$100,000 in the 2009 forecast for consulting services to assist with this process. Please provide the following:

- a. When did HECO first become aware of this SEC action?

- b. Please provide a copy of the SEC communications relied upon with regard to transition timing and objectives.
- c. Please provide a copy of the contract or service quote from the vendor selected to provide these consulting resources. If none, please explain.
- d. Should these costs be partially allocable to HELCO and MECO?
 - 1. If so, please provide and explain the allocation factors that have been or should be applied.
 - 2. If not, please explain.
- e. Please describe HECO's understanding of the extent and complexity of current International Financial Reporting Standards relative to the detailed US GAAP requirements.
- f. Please describe HECO's understanding of the process planned and required to revise, integrate and/or conform current International Financial Reporting Standards to the detailed US GAAP requirements.
- g. Referring to part (f) of this information request, has the SEC, Financial Accounting Standards Board or any other authoritative U.S. accounting entity initiated any proceedings or reviews or otherwise established any timelines or milestones designed to support the complete migration of U.S. accounting and financial reporting to international

standards by 2014? If so, please identify and describe such undertakings or actions and provide a copy of any related documents relied upon by HECO for purposes of assembling the rate case update.

CA-IR-343

Ref: HECO T-11 Update, page 6 & Attachment 2 (Feed-in Tariff Consultants).

HECO T-10 discusses the Company's need for consulting services to research and assist in the design of and develop the pricing methodology for the feed-in tariff. HECO rate case update includes \$230,000 for consultant KEMA, Inc. (\$123,000), outside engineering (\$67,000) and outside legal fees (\$40,000). Please provide the following:

- a. Would retention of the identified consulting service have been required in the absence of the HCEI Agreement? If so, please explain.
- b. Please provide a copy of all documentation supporting the \$230,000 forecast estimate.
- c. Please explain why the Company believes that the amortization of these costs should be included in base rates.
- d. Was any portion of the cost of these consulting services allocated to HELCO and MECO?
 1. If not, please explain why the Company believes that these services are solely beneficial to HECO.

2. Please provide and explain the allocation factors that have been or should be applied to apportion some cost responsibility to HELCO and MECO.

Witness T-14 Mr. Tamashiro.

CA-IR-344

Ref: HECO T-14 Update, pages 3 to 7 & 12-13 (Rent Update).

The referenced Update identifies \$841,000 of additional lease costs included in the rate case forecast associated with four office rentals under negotiation – Waterhouse (Ste. 105 & 106); Waterhouse (Ste. 401, 402 & 403), ASB Tower (Ste. 2970 & 2959), and CPP (Ste. 600, 650 & 680). The spreadsheet supporting Update page 12 shows input rental values for these new leases. Although page 12 contains references to specific pages of Attachments 1 through 4 for additional support, the referenced pages do not show the derivation of the input lease amounts. Please provide the following:

- a. Please describe the current status of and planning schedule for completing negotiations and executing lease agreements for each of the identified areas, providing detailed information regarding any material changes subsequent to compilation of the rate case update.
- b. Please provide additional quantification support showing the derivation of the lease amounts on page 12, including

square footage, lease/CAM rates and GET for each of these areas.

CA-IR-345

Ref: HECO T-14 Update, pages 3 to 7 & 12 to 13 (Rent Update).

The referenced documentation indicates that 24,307 square feet of additional lease space has been included in the rate case update to meet four basic needs: additional staffing due to HCEI initiatives; additional staffing or other organizational changes other than HCEI initiatives; relocation of meter engineering from the Ward basement; and space requirements due to growth. Please provide the following:

- a. Please provide the Company's best estimate of the portion of the 24,307 s.f. of space related to each of the four identified "needs". If this information is not available, please explain.
- b. For each additional office lease rental under consideration, please provide floor diagrams showing anticipated use of the new lease space and indicating the number of employees expected to occupy each area.
- c. To the extent that the employees identified in part (b) of this information request are being relocated from existing owned or leased space (e.g., Ward meter engineering), please

provide additional floor diagrams showing planned utilization and occupancy of the vacated space.

CA-IR-346

Ref: HECO T-14 Update & HECO T-15 Update (Rent & Employee Count Update).

As of October 2008, the rate case update of HECO T-15 (Attachment 6, page 7) shows 1,077 non-power supply employees. Page 17 of the HECO T-15 update also shows non-power supply employee count at EOY 2009 at 1,142 – an increase of 65 employees. Absent the relocation of the Meter Engineering, the additional lease space under consideration would equate to about 374 s.f. per employee (24,307 s.f. divided by 65 employees). Please explain how HECO determined the need for the additional 24,307 s.f. of lease space included in the rate case update and how such space needs relate to accommodating the employee levels included in the rate case forecast.

CA-IR-347

Ref: HECO T-14 Update, pages 3 to 7 & 12 to 13 (Rent Update).

With regard to the basement of the Ward I Building that is experiencing water incursion, Update page 5 indicates that once Meter Engineering Division personnel are relocated, HECO plans to convert the vacated space into training classrooms. Please provide the following:

- a. Please describe the job duties of the Meter Engineering Division and explain how and whether those duties will be affected by AMI deployment.
- b. Please provide the number of Meter Engineering employees (and related workstation count) that are planned to be moved from the Ward basement.
- c. Please provide the area (i.e., square feet) occupied by the Meter Engineering employees that are planned to be moved from the Ward basement.
- d. Please describe the specific future training activities planned for the Ward basement, indicating whether existing lease space used for training purposes (e.g., ASB training rooms) can be vacated as a result.

CA-IR-348

Ref: HECO T-14 Update, pages 8 & Attachment 6 (Ward Base Yard).

Update page 8 generally describes the "significant amount of concrete asphalt" damage and the repair design needed to structurally support the weight of Company trucks using the area. Page 4 of Attachment 6 provides a breakdown of the \$525,000 estimated repair cost included in Account 932, including: conduit/duct installation work; replacement of existing pole, transformer and equipment; as well as the removal of overhead

communications cabling and installation of new replacement cabling underground. Please provide the following:

- a. Please explain why the Company believes that the entire cost of this project should be charged to Account 932, maintenance of general plant, in the 2009 rate case test year.
- b. In order to improve the structural integrity of the concrete asphalt area to support the weight of the Company trucks using this area, does the 7,200 s.f. of concrete asphalt being removed and replaced represent a substantial portion of the total concrete asphalt at the Ward base yard? Please explain.
- c. Please explain how and whether the conduit/duct installation work and undergrounding of communications cabling work is associated with capital Project P0001705 (Wrd undgd security cabling) of \$367,338 sponsored in the rate case update of HECO T-17.
- d. Assuming that there are no units of property being removed from service, please explain why HECO considers none of the work described in Attachment 6 to represent a substantial betterment (i.e., makes the property more useful, more efficient, of greater durability or of greater capacity) over the existing facilities.

- e. Please explain whether and why the Company believes that the \$525,000 estimated repair cost included in Account 932 is annually recurring.

CA-IR-349

Ref: HECO T-14 Update, pages 2 & 3, & CA-IR-161 (Oahu ESA).

At page 2 of the HECO T-14 Update, the Company states that General Electric ("GE") provided a rough order-of-magnitude ("ROM") estimate of \$950,000 for the Oahu Electric System Analysis study. A copy of the confidential GE ROM was provided as Attachment 1 to the response to CA-IR-161. In response to part (b) of CA-IR-161, the Company links the work product from Phase 1 of the GE study of large scale wind efforts at HECO to HCEI. Please provide the following:

- a. Please confirm that GE's confidential ROM was prepared and submitted prior to execution of the HCEI agreement. If this cannot be confirmed, please explain.
- b. Has the execution of the HCEI agreement resulted in any material revision to the scope of work, time line or overall project cost envisioned by GE when the ROM was prepared? If so, please identify and describe any major revisions to project scope, cost or timeline, including copies of any subsequent proposals submitted by GE.

- c. Has HECO requested that GE provide a formal proposal with a revised scope of work, time line and/or overall project cost to replace the GE ROM?
 - 1. If so, please identify and describe any major revisions to project scope, cost or timeline, including submission timetable and copies of any subsequent proposals submitted by GE.
 - 2. If not, please explain why HECO has not requested a formal proposal from GE.

CA-IR-350

Ref: HECO T-14 Update, pages 2 & 3, & CA-IR-161 (Oahu ESA).

At page 2 of the HECO T-14 Update, the Company attributes \$72,000 of the Oahu Wind Study Phase 1 costs to calendar year 2008. This amount does not agree with the GE ROM estimate for 2008, as summarized on confidential Attachment 1, page 10, of the response to CA-IR-161. Please provide the following:

- a. Did GE provide a revised cost estimate breakdown superseding the GE ROM? Please explain.
- b. Does the \$72,000 amount represent the actual amount HECO expensed in 2008 for this study? Please explain and provide the 2008 actual amount.
- c. HECO T-14 Update, page 3, and CA-IR-161 confidential Attachment 1, page 10, show completion of the GE ROM

work by year-end 2009. Is 2009 completion still probable?
Please explain.

CA-IR-351

Ref: HECO T-14 Update, pages 2 & 3, & CA-IR-161 (Oahu ESA).

At page 3 of the HECO T-14 Update, the Company states that \$75,000 originally budgeted for the Maui Wind Study Phase 2 in 2009 was reallocated to the "Oahu Wind Study Phase 1." In response to parts (c) and (d) of CA-IR-161, the Company indicates that HELCO and MECO will be participating in the Oahu ESA study by contributing "in-kind labor" through the participation of their engineers "as internal utility study team members." Please provide the following:

- a. Is the "Oahu Wind Study Phase 1" synonymous with the GE ROM of \$950,000 for the Oahu ESA study? Please explain.
- b. Separately for HECO, HELCO and MECO, please provide the 2009 labor hour forecast for their respective personnel to participate as internal study team members in the Oahu ESA, indicating whether the related labor costs will be charged to O&M accounts.

CA-IR-352

Ref: HECO T-14 Update, pages 2 & 3, & CA-IR-162 (Oahu ESA).

At page 3 of the HECO T-14 Update, the HNEI/USDOE cost share is shown as \$176,000. The response to part (a) of CA-IR-162

refers to this assumed cost share amount and indicates that HECO expects to finalize the GE statement of work and work schedule and then sign an agreement finalizing the cost share amount in the fourth quarter of 2008. Please provide the following:

- a. Please describe the current status of and expected outlook for finalizing the statement of work and work schedule with GE.
- b. Please describe the current status of and expected outlook for finalizing the cost share amount with HNEI/USDOE.
- c. If the responses to parts (a) or (b) of this information request, indicate that finalization of the referenced agreements have been significantly delayed, please provide a detailed explanation of the basis for and cause of the delays(s).
- d. Please provide a copy of all documentation supporting the responses to parts (a) through (c) of this information request.

CA-IR-353

Ref: HECO T-14 Update, page 11, & CA-IR-2 (Community Service Activities).

At page 11 of the HECO T-14 Update, the \$361,000 amount for Community Service Activities has not changed from the Company's original forecast. In the response of HECO T-14 to CA-IR-2, the Company provided Attachments 1 and 11 that further support this amount. Referring to CA-IR-2, Attachment 11, pages 3 to 5,

\$35,384 is identified as CR000443-Native-Plants-O/S Svc, with a further reference to page 5. Please provide the following:

- a. Please describe the business purpose of HECO's involvement in the Grow Hawaiian Festival and Arbor Day.
- b. Please identify and describe the ratepayer benefits resulting from HECO's participation in this activity.
- c. Please provide additional documentation regarding the benefits and responsibilities of the corporate sponsorship for the 2009 Grow Hawaiian Festival.

Witness T-15 Ms. Chioioji.

CA-IR-354

Ref: HECO-1503 and responses to CA-IR-30 & DOD-IR-87 (Employee Counts).

Please provide the following:

- a. Please provide actual/budget employee count reports for all months during the period December 2005 through December 2008 that were not previously supplied in response to CA-IR-30.
- b. Referring to the response to DOD-IR-87, please provide actual employee counts for the months of October through December 2008.

CA-IR-355

Ref: HECO T-15 Update, pages 2 to 11 & 16 (Employee Counts).

The staffing change discussion (pages 2 to 11) contains various references to the HCEI Agreement or related commitments. Referring to the Updated 2009 employee counts on page 16, please identify the number of employees, by department if available, included in the Updated 2009 count that have been or are forecasted to be added as a result of the HCEI Agreement or related commitments. If the information is not available, please explain.

CA-IR-356

Ref: HECO T-15 Update, Attachment 6 (Employee Regression).

Referring to page 7 of Attachment 6, please provide the following:

- a. In the original response to CA-IR-30, HECO supplied actual and budget employee count data on a quarterly basis, beginning with March 2006. Please explain why the Company's regression analysis (i.e., HECO T-15, Attachment 6) starts with September 2006 data and excludes the two prior calendar quarters.
- b. The "% Actual/Budgeted" ratios at September 2006 (91.98%) and December 2006 (92.70%) are significantly lower than the subsequent regression data points, primarily due to the higher budgeted employee counts. Please explain and reconcile the drop in budgeted employee levels

from 1122-1123 to 1086-1087 during late 2006 to early 2007, respectively, identifying and describing any formal or informal austerity/cost reduction programs.

- c. Please explain why the Attachment 6 regression analysis was not limited to quarter-end data, but also included the months of July and October 2008.

Witness T-16 Mr. Okada.

CA-IR-357

Ref: HECO T-16 Update, Attachment 4, pages 6 & 7 (Federal Deferred Income Taxes).

Please provide an updated HECO-WP-1605 spreadsheet substituting actual recorded Deferred Income tax balances by subaccount as of December 31, 2008 in place of the "Estimate 12-31-08" amounts under each scenario. In addition, where necessary provide revisions to the "Estimate 2009" values for each subaccount to reflect more current information and explain each such change.

CA-IR-358

Ref: HECO T-16 Update, Attachment 4, pages 8 & 9 (State Deferred Income Taxes).

Please provide an updated HECO-WP-1605 spreadsheet substituting actual recorded Deferred Income tax balances by sub-account as of December 31, 2008 in place of the "Estimate 12-31-08" amounts under each scenario. In addition,

where necessary provide revisions to the "Estimate 2009" values for each subaccount to reflect more current information and explain each such change.

CA-IR-359

Ref: HECO-1606 and HECO-1607 (Regulatory Assets/Liabilities and Reconciliation to Deferred Taxes).

Please provide an updated HECO-1606 schedule and electronic spreadsheet substituting actual recorded 2008 Amortization and "Adds" and an actual 12/31/2008 in place of the "Estimated Balance 12/31/2008." In addition, where necessary provide revisions to the estimated 2009 activity and the HECO-1607 reconciliation to fully update the amounts provided therein.

CA-IR-360

Ref: HECO Response to DOD-IR-92 (R&D Credit Extension).

According to the Company's response, "Although the Company expects to earn a credit for 2009 (approximately \$330,000 less tax effect), the benefit of this credit is not taken into account for the 2009 test year. The credit sunsets on December 31, 2009 and therefore, HECO has excluded this credit as a normalization adjustment." Please provide the following additional information:

- a. Provide a calculation of the \$330,000 and any related "tax effect", indicating how inclusion of this credit would impact the Company's asserted revenue requirement if not "excluded".

- b. State and explain each reason for "exclusion" of this tax expense savings.
- c. Provide complete copies of all studies, reports, calculations, workpapers and other documents associated with or supportive of your response to part (b) of this information request.
- d. Explain whether HECO knows with certainty that the credit will not be extended beyond 2009 and describe the basis for any such knowledge.
- e. Define what is meant by "normalization adjustment" and describe whether this criteria has been uniformly applied by HECO to eliminate any 2009 expense that will not be recurring in subsequent years.

CA-IR-361

Ref: HECO Response to DOD-IR-92 (FUTA Surtax Extension).

According to the Company's response, "The expectation is that it will be extended again after the current extension. However, consistent with the treatment of the research activities credit above, the surtax (adjusted for revised employee count) should be excluded from revenue requirements." Please provide the following additional information:

- a. Provide a calculation of the \$16,000 and any comparable amounts under the HECO updated test year, indicating how

inclusion of this surtax extension would impact the Company's asserted revenue requirement if not "excluded".

- b. State and explain each reason for "exclusion" of this tax expense savings.
- c. Provide complete copies of all studies, reports, calculations, workpapers and other documents associated with or supportive of your response to part (b) of this information request.
- d. Explain whether HECO knows with certainty that the surtax will be extended beyond 2009 and describe the basis for any such knowledge.

CA-IR-362

Ref: HECO Response to DOD-IR-92 (Smart Meters/Grid Recovery Period/Method).

Please provide calculations showing the Company's best estimate of the further adjustment to test year accumulated deferred income taxes (after the T-16 update) that should be made to account for the 10-year recovery period and 150% declining balance depreciation method for qualifying investment.

CA-IR-363

Ref: HECO Response to CA-IR-36, Confidential Attachment 1 (Income Tax Return documents).

Please provide, to the extent available, actual income tax filing documents for 2007 as an update to this information request response.

CA-IR-364

Ref: HECO Response to CA-IR-251 (Account 282 Calculations).

Please provide, to the extent available, an update to this information request response supporting the Account 282 projected activity for 2009 as reflected in the HECO T-16 updates in Attachment 4.

Witness T-17 Ms. Nagata.

CA-IR-365

Ref: HECO T-17 Update, page 3 (Plant Additions).

The referenced update indicates that completion of Project P0001552 (Kahe-Permanente 46kV Nanakuli) is expected to be completed in 2009, rather than 2008, and has increased to \$2,174,053 from \$785,541. Please provide the following:

- a. Please provide detailed information regarding the soil condition and permitting issues cited in the above Update, including copies of any related documentation that may have been submitted to the Commission in other regulatory dockets.

- b. Please provide a copy of, not access to, the Project Initiation Authorization packet (or similar documentation) for the original and revised project work scope, identified at page 3 of the HECO T-17 Rate Case Update.
- c. Please confirm that this project was undertaken, in part, due to poles falling during the 2006 windstorm. If this cannot be confirmed, please explain.
- d. Referring to part (c) of this information request, please provide the following:
 - 1. Please explain and describe the extent of the windstorm damage, including the number of poles damaged/toppled and whether any other Company facilities were impacted.
 - 2. Was any of the Company property damaged by the windstorm covered by insurance? If so, please explain the extent of the coverage and how/whether any insurance recoveries were reflected in the 2009 test year forecast.
 - 3. Please indicate whether the damaged facilities will be retired from utility service, when such assets were placed in utility service, and provide the estimated original cost thereof.

4. Referring to subpart (d)(3) of this information request, please explain how and whether any such retirements were explicitly reflected in the 2009 test year forecast.

CA-IR-366

Ref: HECO T-17 Update, pages 8 to 10 (2008 Plant Additions).

Project P0001400 (Ewa Nui-CIP Fiber Repl) has been advanced for completion in 2008, rather than 2009 in the original test year forecast. The projected 2008 project cost has decreased to \$549,185 from \$616,975 in 2009. Please provide the following:

- a. Please provide a copy of, not access to, the Project Initiation Authorization packet (or similar documentation).
- b. Is this project related to the CIP1 project? Please explain.
- c. Please provide a detailed explanation of the basis for advancing this project for completion in 2008.
- d. Please provide the actual date this project was completed and placed in-service.

CA-IR-367

Ref: HECO T-17 Update, pages 8 to 10 (2008 Plant Additions).

Project P0001010 (HR Suite Phase 1) has been advanced for completion in 2008, rather than 2009 in the original test year forecast. The projected 2008 project cost has increased to \$630,513 from \$371,580 in 2009. Please provide the following:

- a. Please provide a detailed explanation of the basis for advancing the Phase 1 portion of this HRS project for completion in 2008.
- b. Please provide a detailed explanation for the increase in project cost.
- c. Please explain how the Company determined that this project should be considered as "in-service" in 2008 when a significant portion (\$164,040 or about 26%) of the total cost of this project is expected to be expended in 2009.

CA-IR-368

Ref: HECO T-17 Update, pages 8 to 10 (2008 Plant Additions).

Project P0001514 (Airport Iwilei Shield Wire) has been partially advanced for completion in 2008, rather than fully completed in 2009 in the original test year forecast. The projected plant addition is \$675,592 in 2008 and \$674,067 in 2009 versus 2008 expenditures of \$1,306,851 in the original forecast. Please provide the following:

- a. Please provide a copy of, not access to, the Project Initiation Authorization packet (or similar documentation).
- b. Please explain how the Company determined that this project should be considered as "in-service" in 2008 when a significant portion (\$674,067 or about 50%) of the total cost of this project is now expected to be expended in 2009.

CA-IR-369

Ref: HECO T-17 Update, pages 8 to 10 (2008 Plant Additions).

Project P0001557 (Makakilo C&D Ph1 46k/v) is shown as partially completed in 2008, similar to the original test year forecast. The projected plant addition is \$497,147 in 2008 and \$570,400 in 2009.

Please provide the following:

- a. Please provide a copy of, not access to, the Project Initiation Authorization packet (or similar documentation).
- b. Please explain how the Company determined that this project should be considered as "in-service" in 2008 when a significant portion (\$570,400 or about 53%) of the total cost of this project is expected to be expended in 2009.

CA-IR-370

Ref: HECO T-17 Update, pages 8 to 10 (2008 Plant Additions).

Please provide the following with regard to Project P0001597 (CEIP3 138kV Tsf):

- a. Please provide a copy of, not access to, the Project Initiation Authorization packet (or similar documentation).
- b. Is this project related to the CIP1? Please explain.
- c. If the response to part (b) of this information request is affirmative, please provide a detailed explanation of the basis for determining that the project was (or will be) placed in-service in 2008 when CIP1 will not be completed and in-service until 2009.

- d. Please provide the actual date this project was completed and placed in-service.
- e. Were any facilities specifically retired as a result of the completion of this project? Please explain.

CA-IR-371

Ref: HECO T-17 Update, pages 8 to 10 (2008 Plant Additions).

Please provide the following with regard to Project P0001698 (Check Processing Upgrade):

- a. Please provide a copy of, not access to, the Project Initiation Authorization packet (or similar documentation).
- b. Is this project related to the CIS project? Please explain.
- c. If the response to part (b) of this information request is affirmative, please provide a detailed explanation of the basis for determining that the project was (or will be) placed in-service in 2008.
- d. Please provide the actual date this project was completed and placed in-service.
- e. Were any assets specifically retired as a result of the completion of this project? Please explain.

CA-IR-372

Ref: HECO T-17 Update, pages 8 to 10 (2008 Plant Additions).

Please provide the following with regard to Project P0001699 (ICONA AMI Pilot):

- a. Please provide a detailed explanation and breakdown of project costs between hardware, software, installation and R&D costs that comprise this project amount.
- b. Please provide a detailed explanation of the basis for determining that the project was (or will be) placed in-service in 2008.
- c. Please provide the actual date this project was completed and placed in-service.

CA-IR-373

Ref: HECO T-17 Update, pages 11 to 13 (2009 Plant Additions).

For each project listed below, please provide: (i) a copy of, not access to, the Project Initiation Authorization packet (or similar documentation), (ii) describe how and/or whether these "Ward" projects are related, and (iii) explain why each project is considered to be a capital project when the \$525,000 Ward Base Yard Project (HECO T-14 Update, page 8) has been forecast to A&G maintenance expense.

- a. Project P0001422 (New Ward MW Battery Rm), \$586,145.
- b. Project P0001547 (Ward ITS Generator Repl), \$358,940.
- c. Project P0001705 (Wrd undgd security cabling), \$367,338.
- d. Project P0001287 (Ward bldg 1/2 Atrium Roof), \$549,497.

CA-IR-374

Ref: HECO T-17 Update, pages 3 & 11 to 13 (2009 Plant Additions).

The 2009 plant addition cost estimate for Project P0001121 (Maunalani Hts Reliab) has increased by \$1,030,344 to \$1,598,758 because the original filing erroneously included about \$1 million of plant additions in 2010. Please provide the following:

- a. Please provide a copy of, not access to, the Project Initiation Authorization packet (or similar documentation).
- b. To the extent not adequately addressed in the response to part (a) of this information request, please provide a detailed explanation of the nature of the \$1.5 million of "reliability" work, including a discussion of the factors or events leading to the initiation of this project.
- c. Please provide the Company's best current estimate of the expected date for completing this project, outlining any remaining construction or permitting approval issues yet to be resolved.

CA-IR-375

Ref: HECO T-17 Update, pages 11 to 13 (2009 Plant Additions).

The 2009 plant addition Projects P0001580 (2008 Spare 8% Tsf #1) and P0001591 (2008 Spare 115kV) appear to relate to spare equipment. Please provide the following:

- a. Are these projects related to spare equipment and materials purchased in 2008 and then used in capital projects

expected to be completed and placed in-service in 2009?

Please explain.

- b. Are these projects related to the procurement of spare equipment and materials in 2009 that will be used in future year projects? Please explain.
- c. The names of these projects imply that the related amounts represent items that should be placed in inventory until future deployment to a specific capital project. Please explain the Company's proposal to include the respective amounts in rate base as part of plant in service.

CA-IR-376

Ref: HECO T-17 Update, pages 11 to 13 (2009 Plant Additions).

The projected 2009 cost of Project P0000192 (Waikiki Rehabilitation) has been increased to \$1,928,447 from \$1,678,913 in the original test year forecast. Please provide the following:

- a. Please provide a copy of, not access to, the Project Initiation Authorization packet (or similar documentation).
- b. Please explain the 14.9% increase in the cost of this project.
- c. Please provide a detailed explanation of the need for and purpose of the rehabilitation work, if not adequately discussed in the response to part (a) of this information request.

CA-IR-377

Ref: HECO T-17 Update, pages 11 to 13 (2009 Plant Additions).

The projected 2009 cost of Project P0000809 (K6 Annunciator Replacement) has been increased to \$1,175,741 from \$774,495 in the original test year forecast. Please provide the following:

- a. Please provide a copy of, not access to, the Project Initiation Authorization packet (or similar documentation).
- b. Please explain the 51.8% increase in the cost of this project.
- c. Please provide a detailed explanation of the need for and purpose of the identified replacement work, if not adequately discussed in the response to part (a) of this information request.

CA-IR-378

Ref: HECO T-17 Update, pages 11 to 13 (2009 Plant Additions).

For each project listed below, please provide: (i) a copy of, not access to, the Project Initiation Authorization packet (or similar documentation), (ii) provide a detailed explanation of the need for each project, if not adequately addressed in the PIA, and (iii) explain why each capital project first appears as a 2009 plant addition in the Company's rate case update, but not the original filing.

- a. P0000981 (K5/6 Brkr Deck AC).
- b. P0001538 (K3 PCT Upgrade).
- c. P0001567 (Airport Dist Feeders 2B & 3B).

- d. P0001592 (Kah Per 46kV Improv).
- e. P0001594 (Allure Waikiki 12kV UG).
- f. P0001614 (W5 CWP No. 52).
- g. P0001644 (Waiau-Wahiawa SW OPGW).
- h. P0001681 (Halawa-School OPGW).
- i. P0001682 (Kapolei IC, Ph1-12kV OH & UG).
- j. P0001686 (Kapolei IC, Ph1-12kV OH Conv).
- k. P0001689 (Kahe Technical Trailer).
- l. P0001690 (Ironwoods-12kV OH to UG).

CA-IR-379

Ref: HECO T-17 Update, HECO-1707 & HECO-WP-1707, page 2 (Customer Advances).

The referenced update does not revise the original forecast of customer advances. Referring to page 2 of HECO-WP-1707, please provide the actual recorded receipts, refunds and year-end balance for 2008.

Witness T-22 Mr. Young.

CA-IR-380

Ref: HECO T-22 Update, Attachment 1, pages 2 to 4, Attachment 5 (Purchased Power Adjustment Calculations)

Please explain why the Purchased Power Energy, Capacity and Total amounts in Mr. Young's Attachment 5, page 1 do not tie to the updated Total Purchased Power Expenses shown at HECO T-6 update, page 4 of 37. The Direct Testimony purchased power

expenses of \$477,055 appears to have been retained by mistake and is also shown on HECO T-23 Update Attachment 2, page 1 within the proposed revenue requirement. Please reconcile the intended updated purchased power expense amounts to Mr. Young's Attachment 5, Mr. Hee's ECAC update calculations and provide a reconciliation of updated purchased power expenses in total, indicating the amounts proposed to be recovered through the ECAC, the new PPA clause and through base rates.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing **DIVISION OF CONSUMER ADVOCACY'S FIRST THROUGH SEVENTH SUBMISSIONS OF INFORMATION REQUESTS** was duly served upon the following parties, by personal service, hand delivery, and/or U.S. mail, postage prepaid, and properly addressed pursuant to HAR § 6-61-21(d).

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Counsel for Department of Defense

DATED: Honolulu, Hawaii, January 22, 2009.

A handwritten signature in cursive script, likely of Richard W. Carlile, Esq., is written over a horizontal line.